Ontario's Water Industry Models for the 21st Century

a report prepared for the

Ontario Municipal Water Association (OMWA)

by

Neil B. Freeman, PhD, Public Policy Consultant

ONTARIO MUNICIPAL WATER ASSOCIATION



Who are we?

- The Ontario Municipal Water Association (OMWA) is an association of elected and appointed officials representing the municipal public water authorities in Ontario.
- The OMWA speaks for municipal water authorities and customers on legislative and regulatory matters related to the treatment and supply of drinking water in Ontario.
- The OMWA has a wide cross-section of knowledgeable representatives from the water authorities who provide direction and leadership on policy issues for the association.
- The OMWA works with the Ontario Water Works Association (OWWA) the local professional association of the American Water Works Association - on issues of mutual concern and interest.

What are our objectives?

- The OMWA works to develop and maintain the best possible quality, reliability and safety of the drinking water supply in Ontario.
- The OMWA works to initiate policies related to standards of equipment, operations, and general management that are in the best interests of municipal water treatment and supply.
- The OMWA works to obtain uniform policies for rates, accounting, and operations for all provincial and municipal water supplies.
- The OMWA works to improve municipal water treatment and supplies in cooperation with the Ontario government, the Ontario Clean Water Agency (OCWA) and other water authorities.

Roy Battagello President Don Black
Executive Director

Neil B. Freeman, PhD, Public Policy Consultant

429 Danforth Ave., Suite 307, Toronto, Ontario M4K 1P1 (416) 465-1655, fax (416) 465-3717

April 25, 1996

Don J. Black
Executive Director
Ontario Municipal Water Association
69-225 Benjamin Rd.
Waterloo, Ontario
N2J 3Z4
(519) 888-6402

fax (519) 725-5987

Dear Don,

It is a pleasure to deliver to you and your association my report entitled *Ontario's Water Industry: Models for the 21st Century*.

As the water industry faces the future, I hold great optimism for the continued contribution of public water utilities to the well being of Ontario municipalities and quality of life in the province.

Public water utilities are an excellent complement to the new economic and political times in that they are a tried and true user-pay public service, where the customer is primary and the service is businesslike.

As my report indicates, not only do public water utilities make continued good sense, but Ontarians also strongly support their continued presence.

I wish your association ever success in forwarding the interests of the municipal water utilities and their customers.

Yours sincerely,

Neil Freeman

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Neil B. Freeman, PhD, *Public Policy Consultant* (Adjunct Professor of Political Science, University of Toronto) 429 Danforth Ave., Suite 307, Toronto, Ontario M4K 1P1 Tel. (416) 465-1655 Fax (416) 465-3717

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Freeman - Ontario's Water Industry

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Part 1. Executive Overview: Public Utilities for the Twenty-First Century

Municipal public water utilities are of demonstrably continuing value in Ontario's new political and economic climate. As the twenty-first century approaches, provincial and municipal governments are crossing a public policy watershed. Taking shape is a new philosophy for public finance which holds that the government that provides the service should be responsible for its cost. Since many municipal services have been funded from provincial coffers, the significant reductions in provincial transfers announced in 1995 mean municipal government services are having to be rethought from top to bottom to meet the new constraints. While municipal water utilities are not exempt, the new climate has created a historic opportunity to place them on a sound financial footing.

Municipal public water utilities have always addressed what is at the heart of the province's new economic philosophy -- that public finances are prone to deterioration when there is a lack of financial clarity and transparency to program costs. Until now, Ontarians have generally been shielded from seeing the full cost of government services. The reason is that general tax revenues have funded many government services that rightfully could have been apportioned directly to the users of the services. Being the original user-pay public services, public utilities -- tried and true in the municipal water industry since 1882 -- are very good examples of how other municipal and provincial public services can be offered in an efficient and affordable manner at no cost to the taxpayer.

Public utilities distinguish themselves, first, by operating on a transactional, fee-for-service basis, and, second, by having a distinct, self-contained identity and functional unity. As a result, they are able to mesh sound business principles with full public accountability through open business

meetings and regular elections. Their chief strength is that they supply necessary services on an atcost, not-for-profit basis with the customer primary and the service businesslike.

The reduction in provincial transfers to municipalities, however, has had an unintended consequence that is fundamentally in conflict with the new financial philosophy. Some municipal councils are seeking to make up the difference by cross-subsidizing their general services with the revenues and surpluses of public utilities. Although taxpayers and utility customers are in many cases the same people and businesses, the lack of financial clarity in this type of public finance is part of the past -- municipal councils should be getting their own financial houses in order.

Cross-subsidizing general municipal services through water utility rates is overwhelmingly opposed by Ontarians. Recent public opinion polling conducted by INSIGHT CANADA RESEARCH for the Ontario Municipal Water Association indicates that 77 percent of Ontarians feel that water rates should only be used to improve the water system. Just 19 percent of Ontarians feel that water rates should be used to pay for other municipal services. (4 percent did not know).

Some municipalities are also seeking to privatize their water and other public utilities, using their ability to act as gatekeepers to local customers to extract franchise fees. This is fundamentally shortsighted in the case of water, if not all public utilities. Water is a vital public good needed in daily life for sustenance, and not a private commodity to be bought and sold at a profit. Ontarians hold this view very strongly. Polling by INSIGHT CANADA RESEARCH for OMWA reveals that 77 percent of Ontarians favour water being sold at cost, compared with only 10 percent who favour water being sold at a profit. (13 percent did not know).

Since water utilities are natural monopolies, their customers are captive. But while it is true that there is no "exit" to other supplies in both private and public water utilities, only public utilities offer meaningful "voice" for customers to counteract this lack of "exit." Water customers know this

intuitively. Polling by INSIGHT CANADA RESEARCH for the OMWA clarifies that Ontarians are decidedly opposed to privatization of water utilities. Fully 76 percent of Ontarians favour water utilities being controlled by municipal officials, compared with only 19 percent who favour water utilities being controlled by private businesses. (6 percent did not know).

Public utility commissions are superior to their two chief rivals -- municipal council operated utilities and franchised private water utilities -- because they have no competing objectives, public or private. The best interests of the water customer, to say nothing of municipalities, is not what motivates recent discussions of council administration and privatization -- it is the making up of municipal revenue shortfalls. This is not a well-grounded reason for remaking the industry. When subjected to comparative analysis, public water utility commissions exhibit superior business efficiency and more meaningful public accountability to the customer-public than their two alternatives.

The general problem with municipal council control is that councillors either devote insufficient attention to the needs of public utilities, or they subject utilities to political calculations which interfere with good business practices. Separation of utility and council administration -- one of the reasons for the creation of the Public Utilities Act -- has important advantages. It permits self-contained municipal functions like public utilities to avoid the policy paralysis that occurs with the competing demands in municipal budget formation. Moreover, separate administration serves efficiency and flexibility in administrative practice. These positive values represent the future for multi-function organizations like local government -- large, pyramidal bureaucratic structures are part of the past.

Although private utilities may overcome the problem of cross-subsidization in council operated utilities, they have serious weaknesses, especially in the monopoly provision of water. First

among them is that private water utilities have no obligation to keep rates geared to cost or to keep revenues in the system. In the absence of competitive market pressures, a private water utility has every incentive to exploit its monopoly power in the interests of shareholders. The customers' interest is not primary, which is the exact opposite of the case for public utilities. This ordering of priorities will have significant political repercussions for the municipal council overseers of private water utilities. The customers know who is politically responsible for the franchising. The hidden cost of privatization for the municipality is the regulatory monitoring costs of contract and performance compliance.

While it would be difficult, if not impossible and undesirable, to have uniform delivery of public utility services across the province, the ideal arrangements for the public water utility industry can be enumerated in detail. Where there is municipal government reform, whether for one jurisdiction or the whole province, the ideal arrangements serve as a ready guide for the most appropriate governance and financial structure:

First Principles of Public Utility Governance

- public utilities should be governed by commissions with autonomy from municipal councils
 to ensure service accountability to the public and financial separation from the municipality.
- public utility commissions should be elected rather than appointed to provide unimpeded accountability to the customer and uncompromised business autonomy.
- all municipal water, wastewater and electric functions should be *integrated into joint public utilities commissions* to capture the natural efficiencies from providing related services.
- public utility commissions should be *sized as viable economic entities* and, subject to local needs and geography, should be at the highest level of elected municipal governance.

First Principles of Public Utility Finance

- public utility *rates should be dedicated solely to public utility purposes*, and should not be used to cross-subsidize general municipal services.
- public utility accounts should be managed on a full-cost recovery basis, and thus should not rely on provincial or municipal incentive grants.
- public utility surpluses should not be at the disposal of municipal councils for crosssubsidization of general municipal services.
- public utility accounts should be managed on an industry standard basis, and not meshed with other municipal accounts for purposes unrelated to good business practices in utilities.
- public utilities should *operate on an at-cost, not-for-profit basis* where rates should be neither under-priced nor over-priced.
- public utilities should have the *borrowing freedom to select the proper debt instrument*, subject only to the ability to make repayment.
- wastewater should become a fee-for-service public utility with full-cost accounting like water and electricity.

The public water industry in Ontario is well-suited to the new political and economic climate, but legislative enactments have not left it well-tooled for the challenges of the twenty-first century.

The municipal water industry has suffered from statutory neglect; the provincial water industry has suffered from statutory abuse.

Until the passage of Bill 26 -- the Savings and Restructuring Act, 1996 -- no significant amendments had been made to the Public Utilities Act since the 1950s. While discussion of privatization of municipal water utilities presents a valuable opportunity for the public water utility industry to forward its many merits, Bill 26 does not leave it on a level playing field with private water utilities. The reason for this is that private water utilities can keep all their revenues, whereas

public water utilities are subject to having their rates and surpluses appropriated to cross-subsidize other municipal services.

On the provincial side of the equation, there has been since the 1950s a constant ladening of the water industry with public policy objectives extrinsic to its basic mandate of assisting municipal needs for water and wastewater treatment. The creation of the Ontario Clean Water Agency (OCWA) in 1993 was an important development because it moved these self-contained business functions "off-budget" and left the public policy objectives mostly with the Ministry of Environment and Energy. The government, however, can still appropriate OCWA's surpluses, and OCWA needs the government's permission to borrow even if no government guarantee is required. This will be increasingly problematic in the future. OCWA is not a natural monopoly provider, and has not been granted a government monopoly. Rather, it is a competitive service provider to municipalities, one that needs to be free to pursue its mandated business objectives without undue provincial government interference or constraint.

A historic opportunity exists for the municipal public water utility industry to lead by example as municipal and provincial government is rethought to suit the new philosophy of public finance in Ontario. Municipal public water utilities are a very good complement to the new political and economic climate that is taking shape for the twenty-first century.

Part 2. The Public Utility Concept -- where, what, how, why?

Public utilities -- the original user-pay public services -- provide a harmonious blending of business logic and customer service. As an organizational form, they have been tried and true for one hundred and fourteen years in Ontario's municipal water industry, and their mettle has been tested in the municipal electric industry for nearly as long. Longevity here is directly attributable to the sound principles that are basic to the public utility concept.

Not only does the **public utility concept** have a great deal to offer for the future of the municipal water, wastewater, and electric industries, but its past successes are also instructive as to how other municipal and provincial services can be delivered in an efficient and affordable manner. Public utilities are operated **without subsidy** from taxpayers, surviving only on fee for service, and thus value for money in the public eye. *The customer is primary and the service is businesslike*.

2.1 Ontario Politics -- the current climate

As a concept, the public utility is well suited to the new financial and political climate that faces

Ontario's provincial and municipal governments. With the public mood now viewing government as
too large and government services as not always cost effective, the 1995 Ontario election is a public
policy watershed. Since the election, the new provincial government of Mike Harris, in its wisdom,
has initiated a major adjustment and retrenchment to provincial transfers to municipalities -- \$700
million less over the first two years -- and further cuts may come in the future.

One of the more immediate results of the new financial climate has been the emphasis being placed on determining the full cost of services and apportioning charges to users wherever possible.

Now, only what cannot reasonably be charged in user fees is left to be paid by tax revenues directly.

By promoting an end to cross-subsidization of government services, the provincial government is seeking to instill in the public mind the real cost of government on a service by service basis.

Fee for service is being prescribed as one of the tough medicines that the province has decided is essential to getting its financial house in order. And since transfers to municipalities are a major expenditure for the provincial government, the new financial philosophy is having a significant impact on the amount of money that ends up in municipal coffers. As a result, not just provincial government services, but also municipal services are having to be rethought in Ontario. While the public utilities of the province are not exempt, they are demonstrably of continuing value in this new climate.

Paradoxically, the provincial government's new financial philosophy has had an unintended consequence. It has created the exact opposite incentives at the municipal level to those which have been created at the provincial level. Facing large reductions in the transfers they receive from the province, municipalities are now seeking to get their own financial houses in order. But probably the most negative consequence of this search is the desire to cross-subsidize the cost of general municipal services out of the dedicated revenues of public utilities.

Looking for new avenues to cross-subsidize is shortsighted, and fundamentally at odds with the financial philosophy of the provincial government. In fact, the absence of fiscal transparency for programs is one of the causes of the province's finances getting out of control in the first place. The general public, whether it be the municipal taxpayer or public utility customer, needs to be able to make value-for-money calculations, and these cannot be performed when the real costs of services are disguised.

Cross-subsidization not only enables the municipal government to escape facing up to the full scope of the new financial climate, it also undermines the finances of the public utilities.

Municipal taxpayers, being the same persons as provincial taxpayers, expect local governments to respond to the new financial and political climate in a like manner to the province. That means financial clarity, and no cross-subsidization.

Using the fee-for-service rate revenues of public utility customers to subsidize services that rightfully should be charged to taxpayers distorts the true costs of municipal services. It also wrongly inflates the cost of utility operations, or leads to an inadequate allocation of funds for safe and reliable water services. While property taxpayers are in most cases the same businesses and individuals as utility ratepayers, taxes and rates are collected on different bases. Thus, revenues for general municipal expenses should not be sought from utility customers. Municipal governments should make the tough decisions required to live within their tax base.

Public utilities make continued good sense in the current political climate. They permit municipal governments to be focused on other difficult local public policy choices that need to be addressed, with public utilities left to perform the local business functions. This division of responsibility is the most desirable in terms of public accountability: the municipality to its taxpayers and the public utility to its customers.

Although public utilities have their origin in local government, they are business operations that need to be removed from the direct control of municipal councils. Their direct accountability to the customer is politically compatible with the new financial climate.

2.2 What is the Public Utility Concept?

The genius of public utilities is that they mesh sound business principles with full public accountability. In the local government arena, they are business operations that by statute and bylaw are the creations of municipal government. What distinguishes municipal public utilities like water

and electric service from other municipal government activities is that the service is provided on a **transactional, fee-for-service basis**. Public utilities *are not* tax-supported municipal services. While wastewater in most cases currently falls to municipal taxpayers, it too is a service that *should be* placed on the sound, **fee-for-service basis** of the public utility concept.

By their nature, public utilities have a distinct and self-contained identity. This functional unity is the cause and the justification for their separation from other municipal obligations. While according to this criterion, municipal water utilities are the oldest example, and together with municipal electric utilities provide the two best examples, municipal wastewater services display the same characteristics. It is because of their shared characteristics that there is a natural harmony among the three that should be harnessed. Indeed, the Public Utilities Act was originally established in 1913 to permit their joint administration, and this logic is still persuasive today.

Public utilities, as the examples of water and electricity illustrate, are distinctly different from other municipal services and private businesses. The reason is that they have no competing objectives, public or private.

A municipal council that operates a public utility directly combines its responsibility for general municipal services supported by tax dollars with business services that are financed by customer rates. In the result, the municipality faces conflicting accountability pressures, on the one hand to taxpayers and on the other to utility customers. These are totally different constituencies. While they may be the same persons and businesses, they have different needs and interests. When the finances of municipal councils and public utilities are not kept separate, the public utilities are no longer businesses -- they become agents of the municipal council's social policy.

A private utility business, when operating under a franchise agreement or with outright ownership, meshes profit as a motive with customer service. While in a competitive marketplace

good customer service enhances profitability, in the delivery of utility functions by private companies, service is problematic: private monopolies have customer service disincentives. With no competition, service comes at the expense of profit. Moreover, a private utility, unlike a public utility, is not restricted to ownership of utility ventures in the municipality. Private utility companies have competing business priorities.

Only a public utility, by operating on an at-cost, not-for-profit basis, has a single business objective. Increased profits do not hold paramountcy over increased service. Public utilities, moreover, overcome the disincentives associated with monopoly service. They are regularly accountable to the customer-public in municipal elections, and public utility commissioners are from the community. A public utility is the most visible means for providing direct accountability to the customer.

2.3 How should Public Utilities be Organized and Governed?

There are four key principles that structure how public utilities should be organized and governed in Ontario: autonomous commissions; elected commissions; integrated public utilities; viable economic entities. While it would be difficult, if not impossible and undesirable, to have uniform arrangements for the delivery of public utility services across the province, the ideal arrangements can be enumerated in detail. Allowances for local needs will always be desirable, but establishing such an ideal structure is useful as more than just an exercise. The ideal arrangements serve as a model for reform where change is appropriate.

2.3.1 First Principles of Public Utility Governance

- Autonomous Commissions: Public utilities should be governed by autonomous commissions. Such autonomy from their municipal government is essential for ensuring proper lines of service accountability to the public, and financial separation from municipal government.

 By this principle, public utilities could be elected or appointed. Where they are administered by municipal council committees or the councils themselves, this structure can only be successful with clear lines of financial and service accountability to the customer-public.
- Elected Commissions: Public utility commissions should be elected rather than appointed.

 Only elected commissioners provide unimpeded accountability to the customers. Appointed commissioners are not as directly accountable to the customer. While the first priority of appointed commissioners should be the customers, their appointed status can leave them in cross-pressured situations. Appointed commissioners do not have the distance from their municipal council overseers that is required to keep customer interests distinct from the taxpayer concerns of the municipal council. The political cost of appointed commissions can be that the business autonomy of the utility is compromised.
- Integrated Public Utilities: All of a municipality's public utility functions should be integrated into a single, autonomous public utility commission. This integrated form is the appropriate organizational structure to capture the natural efficiencies from providing related services. It is also the most suitable means for accountability to the customer. At a minimum, the service commonalities that exist with the provision of water, wastewater and electric services should be recognized and furthered. Integrated public utilities can capture

business efficiencies without unnecessary cross-subsidization. All municipalities should disentangle their public utilities from their general services for the benefit of taxpayers and utility customers.

• Viable Economic Entities: Making practical allowances for geography and territory, public utilities should be organized and sized as viable economic entities. While they should carry on their function at the highest *elected* level of municipal government, this should not preclude shared responsibilities with lower-tier municipalities. Should there be broad local government reform, whether for one jurisdiction or the whole province, *any and all new regions or restructured counties should be established with direct elections*, and not rely on appointments from the lower-tier municipalities. In the process, public utility commissioners can be elected alongside councillors.

2.3.2 Managing Public Utilities -- council or commission function?

There are two opposing views on how public utilities should be administered in relation to other municipal government functions and services. On the one side, there is the **command and control model**. It places all municipal responsibilities under the direct control of the council. On the other side, there is the **division of responsibility model**. It holds that, by their nature, certain municipal functions should be administered separately from the council.

While the command and control model can be of advantage in small municipalities and in some of the cases where an autonomous agency spends municipal tax dollars, the command and control model fails to be persuasive in the case of public utilities because they have their own revenues.

2.3.2.a Command and Control Model -- outmoded

The **command and control model** has two primary justifications. The first is that, if autonomous agencies, boards or commissions have independent spending authority, the municipal council cannot be fully in charge and thus is not accountable. The second holds that, for local democracy to be effective, the council must have no rival municipal authorities. The corollary is that the electorate must have only one focus on election day. The view that all municipal functions should be under the direct control of the municipal council reached its zenith in the 1960s.

The two reasons supporting the command and control view belie the original reasons for the creation of public utility commissions. They had their origins in a turn-of-the-century municipal reform movement. This movement emphasized the importance of professional expertise and business principles. While at the time there was a strongly-held belief that municipal politicians were often either inept or corrupt, the reform movement also held that public utility functions were services that should not be subjected to the vagaries of municipal council politics.

Not surprisingly, this reform movement was led by business people seeking to ensure good business practices in government. The cost of the services affected their bottom line. What has survived from that time is the view that municipal councillors do not generally devote sufficient attention to the needs of public utilities. Moreover, the councillors often fail to operate them as businesses. The primary concern on the latter point is that rates will be subjected to political calculations, and thus will be manipulated at the expense of utility improvements.

There is another, more contemporary problem that stems from having all municipal functions under the command of the council -- an excess of control can stifle creativity and efficiency. This outcome can result because the policy focus and attention of the council can only be spread so thin.

While the case is often made that the command and control structure enhances planning capability, its more direct result is that it creates policy paralysis. The reason is that self-contained municipal functions, such as water and wastewater operations, cannot move forward independently of the council. The impediments include competing demands for capital and operating funds, and the predilection for councils to cross-subsidize general services out of utility revenues — a situation that runs counter to good utility management practices.

Oddly enough, the command and control model is the position adopted by the Association of Municipalities of Ontario (AMO). While this model may be suitable in some small municipalities, AMO's defence of large, inflexible public bureaucracies generally seems out of tune with the economic times. The association makes its case for removing the autonomy of utility commissions on the grounds of financial control, but fails to distinguish that public utilities do not draw upon municipal taxes.

2.3.2.b Division of Responsibility Model -- right for the time

A division of responsibilities in municipal government, with the public utilities separately administered from the general municipal services, is advantageous. It promotes healthy competition and rivalry in administrative practices, and thus brings to the fore greater efficiencies in operation for both the council and the public utility commission. For this reason, a uniform structure of local government under the purview of the council is outmoded. Besides the fact that it takes no account of local circumstance, a uniform structure hinders the dynamic and creative activity that can be reaped from separate bodies. Indeed, divided responsibility is precisely what is needed in local government when there is a weak economy.

Diverse solutions are required for different municipal functions. A division of responsibilities permits greater responsiveness on the part of both the council and a public utility commission.

Local government, in all its forms, should be seen as a multi-function, multi-organizational system.

Divided responsibility produces greater technical efficiencies, lower service costs and higher service quality.

The division of responsibility model has advantages for democratic accountability values. While the single structure of the council as the best means to pursue democratic accountability may look good in theory, it operates quite differently in practice. For the council to be on top of all municipal functions, the municipal services end up being extremely bureaucratic and rule-bound. The result is only the red tape of procedural accountability, rather than democratic accountability. In a large multi-function organization like municipal government, procedural accountability only serves to create inflexibility and diminish innovation and responsiveness. Where the command and control model ensures procedural accountability, the division of responsibility model enhances democratic accountability.

The cumulative impact of the command and control model's excess of rules and bureaucratic red tape makes for a council which is out of touch with the desires of the public and less accountable, despite the concentration of political authority. Whereas procedural accountability weakens responsiveness to the public, democratic accountability flows from positive administrative values of efficiency and flexibility.

Accountability is most properly defined as the obligation to be answerable for fulfilling responsibilities that flow from the authority granted. Public utility commissions do not need to fall under the council's procedural rules to be accountable. They can have their own separately defined

accountability to their customers, rather than the municipal taxpayers. It is not an essential principle of local government that the council be the only accountable body.

While the council may hope it can overcome inflexibility through simplification of the procedural rules, this is generally wishful thinking. Such an outcome occurs at the expense of the council's ability to control the plethora of municipal functions, and thus the council's accountability to the electorate for managing the municipality. Small administrative units, less bureaucracy and more direct accountability to taxpayers and customers are the way of the future. Only the division of responsibility model promotes this end.

2.3.3 Integrated Public Utilities -- water, wastewater, electricity

While it is the case that all municipal government functions do not need to be under one administrative structure, there are **efficiency advantages** to be reaped from integrating municipal water, wastewater and electric business into single public utility commissions. Where these public utilities are **fragmented**, this situation unnecessarily exists to the detriment of the customer interest.

Under the *Public Utilities Act*, the water and wastewater businesses of municipalities can be run either by elected commission or by the municipal council itself. Municipal electric utilities must be operated by autonomous commissions that are separately elected from municipal councils. The only exceptions are that municipal electric utility commissioners can be appointed in communities with more than 60,000 people, and they can be administered by township councils and the trustees of a police village directly, as can water utilities.

In practice, integration of responsibility for water, wastewater and electricity does not face insurmountable or even significant barriers. The mechanisms presently exist in the *Public Utilities*Act. All that is missing is either local initiative or incentive, and the latter has arrived with the new

financial climate. One good, new example of integration, alongside those that already exist, could serve as a model by providing the necessary demonstration effect. Integration's driving force is the realization of cost-effective utility services at no cost to the taxpayer.

In cases where larger municipal reform initiatives are in the works -- such as those made easier by Bill 26, the Savings and Restructuring Act -- the public utility concept should be adopted so that the natural harmony of the municipal water, wastewater and electric utility businesses can be together under a single administration.

2.3.4 Government Control of the Ontario Clean Water Agency

The Ontario Clean Water Agency (OCWA) is a crown corporation charged with assisting the province's municipalities with the provision of their water and wastewater services. Being an "agent" of the government, OCWA operates with government supervision that is not that different from a government department. This is not well-suited for a self-contained and self-financed business venture. OCWA needs to be free to perform its specified functions without undue political or financial interference.

Like other government corporations, OCWA, by statute, operates with a board of directors appointed by the government, and a memorandum of understanding signed by both parties. On paper, this suggests OCWA is left alone to perform its function, save for the government making new appointments to the board. The one exception is that the government also has the prerogative of appointing the chief executive officer.

While in theory OCWA is structured with autonomy from government, appointments to date reveal a much different story. Only provincial government deputy ministers have been appointed to the board, and the government has appointed the chief executive officer. The future of OCWA

depends on good business administration, and thus OCWA could benefit from a wider range of input to its board of directors.

The provincial government should, at a minimum, make a commitment to appoint a majority of directors from outside government. It should also leave the appointment of the chief executive officer to the board of directors. Without full business autonomy from the government, OCWA's ability to serve the best interests of the municipalities of the province will be compromised.

2.4 How should Public Utilities be Financed?

Public utilities are distinct from other municipal services because they can be securely financed from user fees. They do not rely on tax revenues. This is their chief strength. This is also the reason that they should not be administered together with other municipal services, but rather should be brought together with other self-supporting municipal utility operations. Within this framework there are six key principles of municipal public utility finance: dedicated revenues; full-cost accounting; no cross-subsidization; de-centralized accounting; at-cost rates; borrowing autonomy.

2.4.1 First Principles of Public Utility Finance

• Dedicated Revenues: Public utility finance is simple — revenues should meet costs, and costs should not exceed revenues. This business 'rule of thumb' means that revenues should be dedicated solely to public utility purposes, and not be used to cross-subsidize other municipal purposes. Of no less significance, public utilities should not distort their finances by drawing on municipal taxes for additional revenues. Being businesses, public utilities should be operated on business principles.

- Full-cost Accounting: The accounts of public utilities should be managed on a full-cost recovery basis. Where joint public utility commissions exist, separate accounts should be kept for each utility. While it has been the case that some water and many wastewater projects have been funded through municipal and provincial taxes, this is no longer appropriate. Now that the Municipal Assistance Program is at an end, the public utilities of the province should see its demise as a historic opportunity to set public utilities on an independent, full-cost accounting financial footing.
- No Cross-subsidization: Public utility revenues should be used exclusively for improvement and expansion of the utility. Surpluses should be used for these purposes only, and should not be at the disposal of the municipal council. Where joint public utility commissions exists, cross-subsidization should not occur between services. While both constraints have always been in place where municipal electric utilities are concerned, the relevant provisions of the Public Utilities Act should be broadened to encompass water and wastewater utilities as well. Wastewater, especially, needs to financed on a fee-for-service basis, rather than through taxes.
- Decentralized Accounting: Public utility accounts should be kept completely separate from other municipal accounts. Accounts need to managed on an industry standard basis, one that is as uniform as possible from municipality to municipality. This produces comparative efficiencies. Thus, the utility accounts should not be meshed with the rest of a municipality's accounts, especially just to satisfy municipal accounting needs unrelated to good business practices in public utilities.

- At-Cost Rates: Public utilities operate on a not-for-profit basis. This means that rates for service are supplied at cost. Rates should neither be under-priced nor over-priced, and they especially should not be used to raise capital for non-utility ventures. Only in this manner can rates be geared to cost and competitive with other municipal jurisdictions. Indeed, analysis of the rates surveys of the Ontario Water Works Association (the local section of American Water Works Association professionals) reveals that water rates are cheapest on average where water is administered by an autonomous public utility commission.
- Borrowing Autonomy: Public utilities operate largely on the "pay-as-you-go" principle.

 While ideally all normal operating and capital requirements are met out of rates and accumulated surpluses, debt is a necessary and useful tool for financing major public utility improvements and expansion. This has the advantage of not unfairly burdening current users with such capital costs. It also has the advantage of smoothing out year-to-year rate changes. Thus, a public utility commission needs complete freedom to select the proper instrument for raising capital. The Public Utilities Act should be amended to permit a commission to issue its own debentures on its own authority. Until such an amendment occurs, municipal councils should be instructed that they can only reject a public utility debenture issue where the repayment requirements cannot be met by the utility.

2.4.2 Wastewater as a Fee-for-Service Public Utility

By many accounts, the wastewater capacity in many parts of the province is in danger of being severely exceeded by requirements. The situation could reach crisis proportions. *The incremental*

and most practical solution to this problem is for wastewater to be operated as a fee-for-service public utility. Moreover, it should also be placed under the wing of joint public utility commissions, where the appropriate business expertise resides to accomplish the job. A historic opportunity exists for municipal public utilities to put wastewater on a sound financial footing.

Moving wastewater to a public utility function has an added advantage for municipal governments -- it moves the service "off-budget," just like electricity and, in many case, water. This is eminently sensible. Where the expenditures have been "on-budget," the true financial cost of wastewater services have not been fully apparent to taxpayers. The primary reason is that there has not been full-cost accounting. Another is that municipal governments have in some cases relied on provincial government transfers for partial funding.

Being out of sight, wastewater services are in danger of continuing to be out of mind. They will never be on a sound financial footing so long as they are in competition with other, more visible municipal services for a proper share of municipal tax revenues. Municipalities now have to take full financial responsibility for their wastewater requirements. Since increases in taxes are an unattractive option, wastewater is a prime candidate for provision on a fee-for-service basis.

Wastewater public utilities are the right means for the public to appreciate the full cost of sewage services, and thus the means for the full costs to become transparent. They also have the advantage of providing the right environmental and conservation incentives. The customer will only be provided the proper economic information when wastewater rates are tied to costs.

2.4.3 Financing the Ontario Clean Water Agency

The Ontario Clean Water Agency (OCWA) needs to have its financing unleashed from the shackles of government controls. Although created as a crown corporation in 1993 through a transfer of the

Ministry of Environment's water and wastewater operational responsibilities, OCWA is not a natural monopoly and does not enjoy a government monopoly. It is a service provider to municipalities that has to compete with private sector operators vying for the same business. For OCWA to compete effectively, the playing field should be level, and this is not the case at present.

There are two financial constraints on OCWA that affect its ability to compete. OCWA can be required to turn over its surpluses to the provincial government, much like the situation with the municipal water utilities of the province. Moreover, it cannot issue debt without the approval of the Minister of Finance, and can only have its debt arranged through the Ontario Financing Authority, another crown corporation controlled by the Minister of Finance.

This situation will become increasingly untenable, and may have an impact on municipal water and wastewater utilities, if the Minister exercises authority. OCWA must not face any barriers to entry in its industry that would not also affect its competitors. If it does, municipalities might not be assured of a competitive field of service providers. For this reason, it is advisable that OCWA be freed of the constraints on its financing, and until this occurs, the government should pledge not to limit the financial autonomy of OCWA.

2.5 Why is Public Utility Privatization not an Answer?

Customers of public utilities have, in political terms, "voice." That voice is exercised in regular elections under the Municipal Act, and through the open meetings of public utility commissions.

While this is crucial in a natural monopoly utility business like water, the customer does not have voice if a utility operation is franchised to a private company. Franchised utilities have undesirable consequences for both the customer and the municipality. Not only are the customers captives of the company because they have no "exit" to other suppliers, but also the municipality is on the hook for

customer complaints. Consumer councils and other such feedback mechanisms, if they even exist, are no substitute for voice with elected public utility commissioners.

While a municipality may think it can deflect responsibility for the operation of a privatized utility, public dissatisfaction falls to those who permit the private company to operate in the municipality. What the municipality may gain by divesting itself of responsibility for a utility, it more than loses through the increased political costs that stem from the loss of public accountability.

Privatization has political costs because there is no "voice" for customers.

Franchising public utilities seems an attractive option because the municipality, as the gatekeeper to the local water customers, collects a franchise fee from the private company. There are many problems with this otherwise simple outcome. For instance, the municipality's self-interest in receiving a large franchise fee runs counter to reasonably priced utility services. Private companies will be only too willing to pay a high fee, knowing that they can pass on the cost to the customer in increased rates. Moreover, the municipality, in the company's eyes, is "bought and paid for" and thus in a weak position to defend the customers' interest.

The fundamentally unfair result of privatization is that the customer ends up paying for the utility twice. Having already paid for the utility a first time prior to the sale through rates, the customer has to pay again for the utility through the increased rates necessary to pay the franchise fee.

Private utility franchises operate under contracts with municipal governments. Since a private company enters the water business to make a profit, rather than for the good of the public, it has little incentive to take on added utility responsibilities. New challenges and demands will nonetheless arise during the life of the franchise agreement, such as the installation of improved treatment processes. Indeed, the company will insist on financial compensation from the municipality or initiate

special levies on customers for the upgrades. Political responsibility for changes in the contract will fall to the municipality. As a result, the municipality will need to have expert staff just to oversee the private water company. Regulatory and monitoring costs are hidden costs to water privatization.

Privatization's overall cost to the municipality is also largely hidden through cross-subsidization. Since the municipality receives the franchise fee, it can use the fee to finance services that would otherwise require tax increases. Meanwhile, having paid the franchise fee in higher water charges, utility customers in effect subsidize general municipal services. The higher the fee, the higher the water rates are above the business costs of a public water utility. Increased business costs are the causal effect of privatization. Cross-subsidization through water utilities is a locational disincentive for business, and thus a hindrance to economic growth.

Private utilities, ironically, have higher business costs than public utilities. All evidence suggests that they pay much higher executive compensation than public utilities. They also have to pay higher costs for financing, pay income and property taxes, and pay dividends to shareholders. But even with higher costs, a private utility, unlike a public utility, has no obligation to keep revenues in the system.

The ability to raise large profits through a private utility is an end in itself. In the absence of competitive market pressures, a private utility has no pressure to keep rates geared to costs. As an example, a private company can use the revenue stream from a water utility to launch other business ventures outside the municipality, and/or to pay large dividends to shareholders. These are the rewards for claimed business prowess. While in a competitive marketplace this would be true and acceptable, in water utilities the profits are obtained through monopoly rents from captive customers.

The incentives at work in private utilities also do not serve the long-term interest of the water or other utility infrastructure. In the years leading up to the end of a franchise agreement, a

private company has no self-interest in making desirable, if not essential investments in improvements and expansion. There are two interrelated and obvious reasons.

When a franchise agreement is nearing its expiration, a private utility operator has every incentive to draw as much revenue out of the system for as little investment as can be put back. And even if the franchise can be regained, the private operator will only drive up the price of its renewal if the value of the utility is increased prior to the renegotiation of the franchise agreement. This has extremely disruptive consequences for the provision of the water supply, and may have public health implications in some circumstances.

There is no distinct public pressure or desire for privatization of water utilities. If utility customers, business and residential alike, felt there would be greater efficiencies and better customer service with private ownership, they would be clamouring for this outcome. But customers are quite justifiably reticent of private owners taking control of the water system, which they regard as a public trust.

The choice for Ontarians is between continued support for public utilities that work for the general advantage of all businesses and customers, and the claimed virtue of private ownership of utilities. The latter is clearly a dubious proposition for the monopoly provision of a public service.

Privatization should not proceed without a full and open cost-benefit comparative analysis with the public utility concept, including the a full accounting of the consequences of contract commitments.

2.6 Why are Public Utilities the Answer?

Public utilities have not only had a long and distinguished history in Ontario -- they are also the perfect complement to the new challenges for municipal government as the 21st century approaches.

Entering a new era, public finance will face new tests for transparency and full disclosure. Cross-subsidization of services belongs to the past. Public utilities, on the other hand, being the original user-pay public service, are the way of the future because they combine businesslike operations and full public accountability.

Any restructuring of municipal public utility functions should be guided by what is in the best interests of the customers. By virtue of their harmonious blending of business logic and public accountability, public utility commissions are superior to both their chief alternatives -- direct operation by municipal councils and privatization.

When they are operated directly by municipal councils, public utilities do not receive the attention they require and deserve. Ontarians will no longer be tolerant of such a situation. A major rebuilding of the province's municipal infrastructure is required, especially for wastewater, and this cannot depend on the whims of municipal councillors seeking to balance the competing pressures at work in municipal budgets. Moreover, municipal councils have difficulty resisting the temptation to finance general services that should be paid for out of taxes, with the dedicated revenues of public utilities. This is in the interest of neither the taxpayer nor the utility customer.

In the operation of utilities by private companies, profitability ranks ahead of customer service. Given that a private company has to pay a franchise fee and has higher business costs in executive compensation, dividend payments and financing charges, customer rates will only be cheaper under private ownership if they come at the expense of product quality and customer service. As with the case of council operation, a private utility has incongruous business priorities and, indeed, faces disincentives to invest in utility improvements.

Public utility commissions are nonetheless more than just the lesser of other evils. They have the advantage of being able to provide service on an at-cost, not-for-profit basis. Public utility

commissions do not have other business objectives, public or private, and only a public utility can provide effective long-term planning. Through this single function, public utilities remain focused on their customers' needs, and public accountability through regular elections and open meetings ensures this is the case. The ownership and control of utilities should be in the hands of public utility commissions.

Public utility commissions are major economic actors in local government affairs, and important contributors to the economic well-being of the municipality. The renewal of public infrastructure is a major public policy imperative, and public utilities, as both businesses and democratically accountable public authorities, are well positioned to tackle these responsibilities.

Autonomous public utility commissions utilize a full range of services from the private sector, including contracting out all manner of construction and even plant operation. Control and ownership must be public, but autonomy from the council permits the flexibility to operate on sound business principles. *Public utilities are good for private business*.

Keeping the "public" in public utilities is vital to the well-being of Ontario communities.

Part 3. Ontario's Water Industry: Background and Structure

The water industry in Ontario, on both the municipal and provincial sides, has suffered from an insufficient degree of autonomy from public policy objectives extrinsic to its basic mandate. When its concern should have been the supply of safe and reliable drinking water that is of good quality, the water industry's business foundation has always been jeopardized. The culprit is the ability, and sometimes the practice, of municipal and provincial governments to cross-subsidize their other activities through the revenues of the water industry.

While the municipal and provincial water industries should operate in the same manner as the municipal and provincial electric industries -- that is with full-cost accounting and without cross-subsidization -- exactly the opposite has been the case. The electric industry has always had dedicated revenues for improvements and expansion, and has operated on a strictly at-cost basis.

This is the scenario that would best suit the water industry, but is not true even of the recently created Ontario Clean Water Agency (OCWA).

What the analysis in this Part makes evident is that the municipal side of the water industry suffers from statutory neglect and the provincial side suffers from statutory abuse. Since their origins in 1882, the provisions that govern the municipal water industry have barely changed. Moreover, this industry has recently been placed on an unequal footing with any prospective privatized water utilities as a result of the Harris government's Bill 26 -- the Savings and Restructuring Act. Not only are municipal water utilities poorly equipped for the twenty-first century, but any privatized utility can also compete unfairly by being able to keep all its revenues.

As for the provincial side of the water industry, the government did not take an active role until the 1950s. Thereafter, it has continuously laden the industry's business foundation with public

policy objectives beyond its basic mandate to assist the municipalities with water and wastewater treatment. Even OCWA, despite its corporate autonomy from the government, is subject to an inordinate degree of government policy influence and direct policy control. Public utilities have to be removed from political control that is extrinsic to their basic mandate.

In this Part the mandate and governance structure of the municipal and provincial sides of the water and wastewater industry in Ontario will be tracked from their origins to the present. Since there is a natural operational harmony on the municipal side between water, wastewater, and electric utilities, the last mentioned, and their relationship with Ontario Hydro, will be drawn into the analysis for comparative and illustrative purposes.

3.1 The Water Industry and the Evolution of Provincial-Municipal Relations

The water industry in Ontario is inextricably linked to municipal and provincial government. Since the provincial government has constitutional jurisdiction over municipal government, the province can statutorily dictate the character of the local water industry. Municipal governments are nonetheless a powerful force in the policy-making for the water industry because they represent local values and sentiments. For these reasons, a full appreciation of the water industry in Ontario requires an understanding of the context in which the provincial-municipal relations exist.

Provincial-municipal relations in Ontario have passed through four eras, swinging back and forth through structural and administrative/financial change. These eras have had important political implications for how the water industry evolved in Ontario, and also have significance for the nature of the public utility concept. The four eras are: (1) the creation of municipal governments, (2) the establishment of provincial funding and policy control of municipal affairs, (3) the (only partially

successful) 'regionalisation' of municipal government, and (4) the present situation, where provincial funding and policy control is faced with adjustment and retrenchment.

3.1.1 Municipal Governments -- the creation

The origins of municipal government in Ontario follow a quite different pattern from that of the New England town hall meeting. British colonial officials perceived this form of self-governance as having contributed to the popular discontent that led to the American Revolution, and thus they were loathe to let the same occur in Canada. Thus, apart from larger pre-Confederation centres like Kingston, Toronto and London, municipal government followed the establishment of Responsible Government in 1848. The Baldwin Act, the first Municipal Act, was passed the next year, in 1849.

During the second half of the nineteenth century, municipal government was viewed as the politically convenient means for the provincial government to promote infrastructure spending, and thus a base for economic expansion that did not increase the provincial government's own debt. The direct cost to the locality was the introduction of municipal taxes. The price paid by the province was the creation of financially autonomous municipalities, ones not beholden to the province. It was in this context that municipalities began to establish water utilities. The Municipal Waterworks Act, 1882, was a prime example of the province using its statutory powers to facilitate municipal infrastructure spending.

3.1.2 Provincial Funding and Policy Control

Around the turn of the century, the provincial government came to limit municipal autonomy, in the cause of provincial industrial development objectives and the promotion of uniform municipal services across the province. A growing interventionism on the part of the province, going beyond

just facilitating municipal infrastructure spending to providing financial and administrative inducements, arose from technological changes and new economic conditions. The invention of the automobile, for example, led the province to offer municipalities payments for building roads. However, in the case of waterworks, there were no broader objectives that required provincial interference and diminished local control.

Waterworks stand out as a local service that was subject to only minimal provincial supervision, in this case through the *Public Health Act*. Indeed, water utilities remained local initiatives throughout the second era of provincial-municipal relations. The reason, for the most part, was that they did not require provincial inducement or provincial provision of a service, like water trunk lines comparable to Ontario Hydro transmission lines. Although the gas industry began locally through the conversion of coal, it later became integrated after the province was served by natural gas pipelines, first from Texas and then western Canada. All these utilities -- water gas, electricity -- have a near uniform presence, but only water remained largely a local, municipal initiative. Provincial public health standards were the only regulations governing the provision of water. For this reason, water utilities are an important manifestation of local values and expression of local government.

3.1.3 Regionalisation

The third phase of provincial-municipal relations was structural like the first, and involved the creation of **regional governments** in the 1960s and 1970s. The stimulus for regional government had been the successful experiment that the 'metro' level of municipal government had proved to be in Toronto since being established in 1954. The political fragmentation caused by suburban growth was thought to be an impediment to planning and economic development for the larger urban area as a

whole and, indeed, the creation of Metropolitan Toronto was followed by growth and prosperity.

Regional government was thus designed to have an important impact on economic development through the movement of municipal services to this new level of government.

In most instances, water, which was known to be crucial to development, was made a regional responsibility for planning reasons, although in some cases responsibility was shared with lower-tier municipal governments. Electricity, on the other hand, remained largely at the lower tier because **Ontario Hydro** provided the planning function. The government sought a broader adoption of regional government not only for these purposes, but also to promote a rationalization of the number of municipalities in the province. Municipal objections to regional government, including the fact that regions are appointed from the lower tier rather than separately elected (except in Metropolitan Toronto), meant this *new upper tier of municipal government was only implemented in twelve jurisdictions*.

Although the third area of provincial-municipal relations in Ontario was structural like the first, ironically it was during this time that the province took a concerted interest in the municipal water industry. Decades after providing incentives for roads and other municipal services, it established the **Ontario Water Resources Commission** in 1956 to assist municipalities in developing water and wastewater facilities. Later still, the environmental significance of these business operations led the government to absorb the OWRC into the newly established **Ministry of the Environment** in 1972.

3.1.4 Adjustment and Retrenchment

The fourth era of provincial-municipal relations consists of the changes currently under way to existing provincial-municipal financial and administrative arrangements. While the changes are

motivated by the view that the government performing the service should finance the service and be accountable to taxpayers, they also reflect the view that government is too large and the rules for those doing business with government are too complicated and technical. This new direction in relations will ultimately lead to a reduction in the degree to which there is uniformity of municipal services and public utilities across the province, if any at all.

Uniformity was necessary for early economic development and public health protection, but competition and diversity are now being explored as a spur to economic development. With financial constraints driving this new political agenda, the future will hold greater autonomy for municipal governments, much like the latter half of the nineteenth century, and thus undo the provincial political control and regulation that began at the turn of the century. But even with these changes, the provincial government will likely set priorities for municipal government, for which dynamic municipalities will opt in and others will pass up.

In this environment, the government has taken action on both the provincial and municipal fronts regarding the water industry. On the provincial front, the former NDP government established the Ontario Clean Water Agency, a body with an almost identical mandate to the old OWRC.

OCWA resulted from the hiving off of the business operations of the Ministry of Environment [and Energy], leaving in place the broader public policy and regulatory goals.

On the municipal front, the new Conservative government has made it easier for municipalities to sell off their water, wastewater, electric and other utilities and services to private companies. As the remainder of this Part will illustrate, the creation of the OCWA is an important and progressive development because it establishes a business climate for the provincial end of the industry. The privatization of municipal water and wastewater works, however, is an insufficient response to the challenges facing the local industry in the next century.

3.2 The Municipal Water and Wastewater Industry -- statutory neglect

The municipal water industry in Ontario had its origins in the first era of provincial-municipal relations, prior to the turn of the century. This was the era when the provincial government wanted municipal governments to establish the local infrastructure necessary for economic growth and expansion in the province. With the end of the twentieth century now approaching, the surprising feature of the industry is how enduring have been the statutory mechanisms that govern the municipal water industry.

There has been very little alteration to the original outline for the municipal side of the industry, although it has been supplemented by additions on the provincial side, first with the Ontario Water Resources Commission and, more recently, with the Ontario Clean Water Agency. While these latter developments, (which will be discussed in section 3.3), prepare the provincial side of the industry for the next century, the time has arrived for the municipal water industry to be given the tools to meet the challenges of the next century.

3.2.1 Municipal Waterworks Act, 1882

The statutory origin of the water industry began with the passage of the *Municipal Waterworks Act*, 1882, which permitted municipalities to create water utilities, and notably, extend them into other municipalities under agreement. While the *Waterworks Act* stated that water utilities could be operated by councils or commissions, it was this *Act* which established the provision for three-person or five-person commissions including the head of council ex officio. This model for governance actually became the structure for all public utilities, after its provisions were subsumed into the original *Public Utilities Act*, passed in 1913.

When run by commissioners, waterworks did enjoy a level of administrative freedom that did not exist when under the control of councils. The water commissions were to keep their own accounts, submit an annual report to the council, and charge their borrowings against the works constructed. This meant waterworks were structured from the beginning as self-financing entities, and this principle has stood water utilities in good stead for over one hundred and fourteen years.

The water utility commissions, however, were not fully autonomous from their municipal councils, which retained power to exercise control over all local government affairs. Not only were the waterworks declared the property of the municipal corporation, but the councils were also given the power to pass bylaws governing the administration of the utility, and indeed councils could set the salary of the commissioners, or even could take over a commission. Most important, the excess of revenues over expenses were to be paid over to the council on a quarterly basis. Thus, water utility commissions did not fully enjoy dedicated revenues despite having the power to keep their own accounts, and this has been a problem down to the present day.

There were only three amendments made to the *Waterworks Act* prior to the passage of the *Public Utilities Act* in 1913. The first, in 1887, established **popular suffrage as a means for** initiating public water utilities. On the petition of electors, the council was required to hold a bylaw referendum, for which only a two-thirds vote of council could stand in the way until the next municipal election could be fought on the issue. The second, in 1890, established that a special levy for construction of municipal works was permissible. The third, in 1909, was an illustration of their public mandate. It obliged water utilities to supply all public institutions within a municipality, and in 1930 this would be amended to require the same within three miles of the municipality.

3.2.2 Public Utilities Act, 1913 -- joint utility commissions

The passage of the *Public Utilities Act* in 1913 occurred for a very important and pressing reason. With the completion of Ontario Hydro's first transmission lines in late 1910, there was broad enthusiasm for the establishment of municipal electric utilities in particular, and other public utilities in general. The new *Act* met this need largely by permitting *joint public utilities commissions* for two or more utilities. To accomplish this objective, the *Act* subsumed the provisions of the *Municipal Waterworks Act*, 1882, and the *Municipal Light and Heat Act*, 1883, of which the latter had until this time been used to facilitate the manufactured gas industry and the emerging electric industry. While the enactment did not change provisions specific to the operation of waterworks, *it now allowed wastewater works to be operated by a utility commission*.

The general provisions of the *Public Utilities Act*, 1913 did augment the autonomy of the commissions, however marginally. A commission operating under the *Act* was now given all the powers conferred to municipalities to perform their function, and they were considered to be "body corporate," and thus in law legally distinct from their municipal councils. The financing of each utility with dedicated revenues was enhanced as well with the provision that there were to be separate books and accounts for every utility, presumably to inhibit cross-subsidization among the utilities. This did not, however, change the fact that utilities, save for electric ones, could be used to subsidize other municipal expenditures, a failing of the *Act* that exists today.

The exception for municipal electric utilities was even broader than painted above. Unlike water and other utilities, they could be run only by commission, their bylaws could not be repealed without the consent of Ontario Hydro, and they were to operate subject to the provisions of the Power Commission Act. This Act stated, in particular, that electricity revenues could only be used for expansion and renewal, and thus not for other municipal purposes. The exception for electricity in

the *Public Utilities Act* was augmented further in 1917 and 1924. In the first instance, the salaries for commissioners of municipal electric utilities, and public utility commissions (PUCs) with electricity, were now to be approved by Ontario Hydro in addition to the municipal council. Although this provision for utilities with electricity would be dropped in 1979, this was an indication that there were larger political repercussions for local electricity extravagance than, say, for a water utility. In 1924, the *Public Utilities Act* was amended to prohibit a PUC from charging to its electric accounts more than a pro rata share of joint expenses. This was a good development for public utilities generally, in that it *ensured that utilities were self-supporting and not cross-subsidized*.

The 1917 and 1924 amendments were also significant for the manner in which they affected the autonomy of public utilities, but especially those other than electricity. The first gave them more financial freedom. The excess of revenues after expenses that were to be paid over to the municipal treasurer now had to be applied exclusively to the utility debt, although this provision lasted only until 1944. This new financial autonomy was constrained at the other end in 1924. Municipal councils were given the power to fix their rates by resolution, although **Ontario Hydro** still had the power to approve municipal electric utility rates. In 1946, the council power would be limited to setting rates where the existing ones were insufficient.

3.2.3 The *Public Utilities Act* since the Depression

With the arrival of the Depression, the *Public Utilities Act* faced some significant amendments in 1931, ones reflective of the economic times. These changes spelled out new avenues for municipalities to dispose of their utilities, or parts of them. However, the sale of all utilities, including water, could only proceed with the assent of electors, and the sale of municipal electric utilities needed the additional consent of Ontario Hydro. The proceeds from the sale had to be

applied to the debt of the public utility. Where the proceeds exceeded the debt, the municipality, with the permission of the **Ontario Municipal Board**, could apply the money to other municipal debt or capital projects.

Continuing the exception for electricity, use of a municipal electric utility's proceeds had to be approved by Ontario Hydro. The 1931 amendments, however, also strengthened the provisions that, where commissions exist, the commissions rather the municipal councils are responsible for the administration of the utility. In addition, commissions were now given a new measure of financial authority through the power to appoint their own auditors.

The *Public Utilities Act* was left unchanged until near the close of the Second World War. In 1944 it was amended to distinguish how surpluses for municipal electric utilities were to be handled as distinct from water or other utilities. While surpluses after debt retirement from the non-electric utilities were still the property of the municipality, municipal electric utilities only had to pay down the debt of the municipality on behalf of the electric utility, with the remainder becoming the property of the municipal electric commission. In 1951, however, the Act was amended to provide that the surpluses of the water and other utilities (except electricity) were only available to the municipality after stocking a council-authorized reserve fund for improvements and expansion.

Since the 1950s, no significant change to the *Public Utilities Act* occurred until 1996 when municipalities were given the power to dispose of utilities without the assent of electors, of which more will be said later. Filling the vacuum prior to this change, the provincial government has taken a great interest in the water resources of the province since the 1950s. While this has aided local water and wastewater utilities to perform their functions, these bodies have not been given the statutory modifications that they require to operate as efficient and accountable businesses.

3.3 The Provincial Water and Wastewater Industry -- statutory abuse

While the provincial government had concentrated on using municipal governments to establish the water industry in the province from 1882 onwards, it had not abandoned any role for the provincial government. Indeed, two years after the *Municipal Waterworks Act* was passed, the government passed the *Public Health Act*, 1884, for which one of its many purposes was the granting of provincial approvals for municipal water and wastewater works. This was not, however, an equivalent to the government's creation of **Ontario Hydro**, which institutionalized a provincial relationship with the municipal electrical utilities.

The municipal water industry was virtually left alone throughout the second era of provincial municipal relations, wherein financial and administrative arrangements were made for provincial support of local undertakings. This situation changed in the third era, the restructuring of the municipalities after the mid-1950s, when the government created the Ontario Water Resources

Commission (OWRC), in effect, to provide the provincial leadership and incentives that had come decades before for other municipal services.

3.3.1 Ontario Water Resources Commission -- creation, 1956

The primary function of the OWRC, as originally constituted in 1956, was to ensure sufficient development of water supplies and wastewater facilities to meet Ontario's needs in an expanding postwar economy. The OWRC was mandated to pursue these objectives by either developing the facilities on behalf of municipalities or by developing the facilities for municipalities. It could also do the same for individuals. For these ends, the OWRC was given all the powers of a municipal corporation, including the power of expropriation.

In order to perform its functions, the OWRC was given the power to borrow money and provide security, and could also make use of a provincial debt guarantee to obtain better financing arrangements. Municipalities were to apply to the commission for services, and initially the contracts did not require cabinet approval, which was not the case with the contracts between municipal electric utilities and Ontario Hydro. Further, the municipalities were to pay charges to the OWRC that included interest, debt retirement, and operating and maintenance costs. As an aid in fulfilling its primary functions, the OWRC was also given policy-oriented subsidiary functions, specifically that of conducting research and building a statistical base for the water industry.

The OWRC's financing features were an indication that it was an agency of the provincial government not unlike Ontario Hydro, which also enjoyed the provincial government debt guarantee. The Hydro model was influential in the shape of the governance structure as well. Where the *Power Commission Act* gave Hydro three to six commissioners, the *OWRC Act* provided for three to five, and while each commission was appointed by the cabinet, they could hire their own staff. The *OWRC Act* also permitted the cabinet to assign a minister to administer the *Act*, and indeed in 1958 that would be none other than John Robarts, a future premier. The *Power Commission Act*, for its part, then required that one minister be a commissioner, and that two may be commissioners, but it did not specify that Hydro was responsible to a minister.

Instead of mandating that a minister sit as a *OWRC* commissioner, the government chose instead to appoint government backbenchers on an informal basis alongside non-partisan commissioners. For example, John Root was a long-time Conservative backbencher who sat simultaneously as an OWRC commissioner. The *Act* also went further than the *Power Commission*Act in that it declared the OWRC a corporation without share capital. However, the OWRC's

autonomy was constrained more than Hydro's because the provincial auditor was the auditor, unless the cabinet provided otherwise.

3.3.2 Ontario Water Resources Commission -- policy mandate, 1958

In 1958 the OWRC Act was completely redrafted. While a fuller description was provided for its primary functions, many new responsibilities were added to its subsidiary public policy functions for water and wastewater works in the province. This further delegation of policy-making to the commission occurred on two levels. The first was the new powers attendant to its existing responsibilities, which now extended to supervision of the operational side of the industry. This included the power to approve all plans, whether the OWRC was involved in the operation or construction of the facilities or not, and to hold hearings on the extension of water and wastewater works from one municipality into another. In addition, the assent of municipal electors for the construction of wastewater works was exempted if the OWRC reported that the facilities were necessary.

The second level was an extension to the OWRC's policy mandate per se. The commission was made the regulatory body responsible for the water supply in the province, which included the power to inspect any municipal facility and to levy fines for polluting water. It was also made the regulatory body that would hear expropriation cases that normally would have gone to the Ontario Municipal Board, and the licencing body for the well drilling industry. The autonomy of the OWRC and the municipalities on water and wastewater was nonetheless narrowed. Like the case of the provincial-municipal electric industry, the contracts between municipalities and the OWRC now required the approval of cabinet.

The *OWRC Act* of 1958 also gave greater detail to the administration of the commission's finances and its agreements with the municipalities. The commission was to establish two consolidated funds, one for reserves for renewal and the other for debt retirement. Both were to be administered by a newly established investment committee, one that did not have to be composed of OWRC commissioners. In order to fund the two consolidated accounts, the levies that the commission could charge the municipalities were given a fuller enumeration.

During the 1960s, the public policy mandate of the **OWRC** would continually be broadened. In 1960, the commission, with the approval of the minister, was given the power to require industrial or commercial enterprises to have their own wastewater treatment facilities. In 1962, the definition of waterworks in the *Act* was expanded to include all works, rather than just those considered public. And the commission was also given supervisory power over the method of fresh water treatment, which could no longer have additives applied without an OWRC permit.

The long arm of the OWRC was, however, lessened in the case of small waterworks that were not utilized for human consumption. They no longer required OWRC approvals for their plans. The same was true of wastewater works that were not discharged into surface or ground waters. It was at this time, as well, that the debt of a municipality to the OWRC was to be included as part of the overall debt of the municipality, thus giving municipalities less financial breathing room.

In 1964, the OWRC's power to hold hearings on pollution complaints was repealed and replaced with the provision that it could seek a court injunction to prevent the polluting of water. The commission was also given the power to remedy the failure of a municipality or individual to fulfil an order. It could now perform the order itself and charge the cost to the municipality or individual.

This directive power was augmented again in 1965 when the Act was further amended to permit the

OWRC, with the approval of the Ontario Municipal Board, to implement one of its report's findings if a municipality or individual had failed to act on the report.

3.3.3 Ministerial Supervision of Water and Wastewater, 1964

In the meantime, the **Department of Energy Resources**, which had been created in 1959 in an effort to establish ministerial supervision of Ontario Hydro, was renamed the **Department of Energy and Resources Management**. Since the Hydro supervision objective had largely failed, for the most part because Hydro had not been made formally responsible to the minister, *the policy mandate of the department was expanded to include energy and water resources*. While the *OWRC Act* was not amended to leave the agency responsible to the minister, the creation of the new department was nonetheless a signal that the there would be *increased ministerial interest in the OWRC's affairs*. On other matters, the commission was now permitted to operate on a cost recovery basis for its regulatory approvals. As an indication of the increasing power of the commission, in 1966 it was given the power to define water and wastewater areas, ones that could have their own terms and conditions, and it could terminate or amend contracts according to the new area policy.

With the arrival of a new public sensitivity to environmental issues, as illustrated by the establishment of **Pollution Probe** here in Ontario in 1967 and the **Environmental Protection Agency** in the USA in 1969, provincial government policy on water would not be unaffected. Given that it had delegated responsibility for policy to the OWRC, the government had reason to expand the mandate and change the governance structure of the commission in 1970. When this was considered insufficient, it would make new changes in 1972.

In the 1970 instance of change, the *OWRC Act* was amended to extend the supervisory and regulatory power of the commission to all surface and ground water, not just that affecting the water

supply. Moreover, the size of the commission was increased to five to eleven commissioners, from three to five. While the amendment also permitted a devolution of authority so that employees could exercise the routine powers of the commissioners, OWRC was nonetheless beginning to lose its overall authority. Public opinion dictated that the minister have increased visibility. As a result, OWRC's power to regulate pollution was changed to permit the commission to do so with ministerial approval, although the commission could still give orders to municipalities or industrial enterprises on water quality.

By 1971, public interest in water quality and the harmful effects of pollution were reaching unprecedented heights, and the Ontario government had to demonstrate appropriate political concern. On the eve of the 1971 election, Bill Davis's first as Conservative premier, the government created the Department of the Environment by giving the existing Department of Energy and Resources Management a new name. Paradoxically, the latter had originated for the energy industry, only to be overtaken by environmental issues. But this would not be the end of the changes. In a general reorganization of government in 1972, the government renamed every department a "ministry", and gave to each one the responsibility for all related agencies.

As part of the statutory changes required, the government went one step further with the water industry. In order to give the new environment ministry a critical mass of responsibilities, the government dissolved the OWRC, with its functions now falling directly under the Minister of the Environment. Thus, in the event, the government took control of not just policy-making; the self-financed water and wastewater business activity was moved "on-budget", and thereby subjected to increased and possibly unnecessary political decision-making and scrutiny.

3.3.4 Environment Ministry as Water and Wastewater Operator, 1972

To effect the transfer of responsibilities, the OWRC Act was renamed the Ontario Water Resources Act, 1972, and was to be administered by the Minister of Environment. Indeed, the autonomous commission structure was terminated, with the minister assuming all of the OWRC's powers. This included the delegation of powers to subordinates, and the independent powers of the commission to make agreements and raise financing also were passed to the minister.

While the OWRC's investment committee continued to exist to administer the funds in the debt retirement and renewal accounts, it was now subject to the supervision and direction of the Ontario Treasurer. Later, in 1974, the investment committee was dissolved, with the assets it managed placed in the new Ministry of Environment's consolidated debt retirement account and consolidated reserve account.

In place of the hearings and regulatory function of the OWRC, the Environmental Hearings Board was created through further revisions to the Water Resources Act in 1974. Like the OWRC, the board was to have five to eleven members, all appointed by the cabinet. And within a year, the conflict that remained between the Ministry of Environment's operational and regulatory functions in the Water Resources Act was resolved. All of the hearings board's functions were passed to the new Environmental Assessment Board, created in 1975. Subsequently, the Water Resources Act would be amended in 1983 to allow appeals to the Environmental Appeal Board following the establishment of that body.

Not much changed on the provincial side of the water industry until the election of **David**Peterson's Liberal government, which took a *tough stand on environmental pollution*. In 1986 it substantially increased all of the *OWR Act*'s penalties and fines, especially for second offences, and created new ones that removed the monetary benefit from polluting. The Minister could also suspend

change references from "municipalities and persons" to just "persons" in order to leave municipal employees and officers individually responsible. Moreover, government officials were given the power to seize offending materials or instruct that they not be moved. Regarding penalties, the Environmental Assessment Board was also now permitted to fix the cost of a polluting offence, and permit the awarding of costs for a hearing. The Act was also broadened to permit objections to hearings and appeals to hearing decisions. The room for appeal, however, was narrowed in 1990 as a result of the Minister being given the power to override an order that had been stayed by the court.

By the late 1980s, a realization was developing that the expansion of the policy mandate of the Ministry of the Environment sat uneasily with the operational responsibility of the ministry for water and wastewater plants. It was clear that the regulatory and supervisory functions had been expanded at the expense of attention to concern for the ministry's responsibilities for water and wastewater. Treasurer Robert Nixon proposed that the operational side of the ministry be transferred to a new crown corporation like the old Ontario Water Resources Commission, but cabinet policy disagreements on this matter and the defeat of the government in 1990 stood in the way.

3.4 The Municipal and Provincial Water Industry in the 1990s

In November 1993, the government created the Ontario Clean Water Agency (OCWA) by hiving off the water and wastewater business operations of the Ministry of Environment. It left in place the policy dimensions in a smaller unit that was amalgamated with the Ministry of Energy to create the Ministry of Environment and Energy. While the change was motivated in part by the government's desire to improve its financial picture through moving costly items "off-budget", it nevertheless

made good business sense for such self-sustaining entities to operate with corporate autonomy from the government.

To facilitate the creation of OCWA, the NDP government of then Premier Bob Rae passed the *Capital Investment Plan Act*, which established the agency along with three other crown corporations. A fourth, the **Ontario Financial Authority**, was also created to manage the financing for the new crowns and other public bodies in the province. The change was consistent with the character of the current, retrenchment era of provincial-municipal relations.

3.4.1 Ontario Clean Water Agency -- business autonomy

OCWA's governance structure and objects clearly spell out its business orientation. It is to have a board of four to twelve directors, all appointed by the cabinet, and it enjoys the rights and privileges of a natural person, a status, for example, that Ontario Hydro would like to have but does not presently enjoy. The primary object of the agency is simply to build and operate water and wastewater facilities for municipalities in its own name or assist the municipalities to build and operate their own. It also has the limited public policy objectives of protecting human health, encouraging conservation, and supporting provincial land use and settlement policies. To achieve these purposes, the agency was given the water and wastewater works of the Ministry without compensation, and by statute the government is prohibited from entering these businesses in its own name.

OCWA was designed to operate on modern business lines, fully removed from the government. Of pre-eminent importance, it is mandated to conduct its business on a *full cost recovery* basis, meaning that it is not to receive appropriations unless, for example, the government establishes a subsidy program for a class of municipalities. In addition, OCWA has enhanced operational

able to contract with municipalities without receiving cabinet approval. And to ensure it had the flexibility to operate like other private businesses, it is permitted to sell its assets so it can enter lease-purchase agreements. It can also act with the freedom of a private business by declaring that for a given project it is not an "agent" of the crown, and it can also waive crown immunity. Although it must operate like a private business, it nonetheless has the advantage of the crown's power of expropriation and the power to make its own regulations for the industry under its control.

3.4.2 Ontario Clean Water Agency -- government control

Despite the emphasis on corporate autonomy, OCWA is subject to numerous mechanisms for government control. Foremost, it was declared, save for the above circumstance, a provincial government "agent". In practice this means that the cabinet can formulate the agency's policy, despite the existence of a board of directors, and the Minister of Environment can review its activities, issue policy directives, and approve all bylaws. In addition, all borrowing must be approved by the Minister of Finance, who can also approve all bylaws that involve debt and equity financing.

Beyond these policy controls, the most important infringement on OCWA's business autonomy is that the Minister of Finance can order the agency to turn over surplus funds to the government's Consolidated Revenue Fund. As well, the latter minister receives the annual report, despite the Minister of Environment being the responsible minister. Less onerous, but a restriction nonetheless, is the requirement that the agency receive cabinet and Treasury Board approval before creating a subsidiary. OCWA does not have the option of selecting its own auditors, and thus falls under the supervision of the Provincial Auditor.

Appointments also fall to the government, and not just the members of the board of directors. The appointment of the chief executive officer is also a prerogative that the cabinet can exercise. Normally, the appointment of directors would only provide the government an avenue of informal influence. However, to date this has amounted to much more. Both Mike Harris's Conservative government and the former NDP government have appointed four deputy ministers to the board, and the NDP named the CEO. By not appointing directors from outside government, the government has inappropriately ensured itself direct and formal control over OCWA. The appointment of the CEO by the government, rather than by the board of directors, has the same effect.

3.4.3 Bill 26 -- the Savings and Restructuring Act, 1996

While the provincial side of the water industry has been retooled for business in the twenty-first century, albeit with a statist orientation that may cause problems, the municipal side has languished, without being afforded the same opportunity for improvement in the future. Instead, the water industry was hurriedly submitted to the prospect of privatization and rationalization as a result of the government's Savings and Restructuring Act, known as Bill 26, passed on January 30, 1996. These are the two key outcomes of the Act as it affects public utilities. While rationalization may not be incompatible with the improvement of public utilities, the possibility of privatization unfairly pits the hampered structure of the water industry against the claimed advantages flowing from privatization. Nevertheless, the change reflects the government's desire to move away from supporting uniform municipal services, and is thus characteristic of the fourth era of provincial-municipal relations.

One key component of the Savings and Restructuring Act is that it is now much easier for municipalities to dissolve or make changes to their local water and other utilities, whether they are

single units or part of joint public utilities commissions. There are only two reasons for dissolving a board: so the municipality can take over the utility, or so a private company can purchase a franchise to operate the utility for the municipality. The significance of this power can only be fully seen when matched with the corresponding power of the municipality to bypass the provisions in the Public Utilities Act and the Municipal Franchises Act that require the assent of electors prior to establishing or disestablishing utilities.

While school, police, and conservation boards are expressly exempted from dissolution in the Savings and Restructuring Act, the Minister of Municipal Affairs can declare through regulations that other boards not be dissolved. As of March 1, 1996, such a regulation has been approved for municipal electric utilities while they are under the review of the Advisory Committee on Competition in Ontario's Electricity System (Macdonald Committee). The minister, however, also has the power to allow a municipality to act as the local board, exercise the board's powers, or stand in the board's place.

Rationalizing the number of municipalities and municipal boards like those controlling water and wastewater is a second key objective of the Act on the municipal front. The provision allows municipalities to present proposals to the minister, and for the minister to create restructuring commissions, although only at the request of the municipality. The broad objective is to facilitate "significant" and "timely" restructuring over large areas, which may include the elimination of a layer of municipal government and changes to the form of representation.

In contrast to this sweeping generality, the **provisions for restructuring local boards** are more detailed. In essence, an upper-tier municipality can pass a bylaw to provide for a service presently delivered at the lower-tier, and if more than 50 percent of the lower-tier municipalities pass bylaws to the same effect, the service is moved to the upper-tier for *the whole municipality*.

Similarly, a lower-tier municipality can pass a bylaw to take over an upper-tier responsibility, and if more than half of the other lower-tier municipalities do the same, and they represent over half of the electors in the upper-tier municipality, and the upper-tier municipality gives its consent, the service is transferred to the lower-tier and each lower-tier municipality is bound to the change.

3.5 Ontario's Water Industry -- past, present, and future

As they face the twenty-first century, the municipal water and wastewater public utilities in Ontario have been disadvantaged by statutory neglect. Not only have their statutory needs not been updated for the future, they have not been placed on a level playing field with private sector operators who can now take them over because of recent amendments to the Municipal Act and the Public Utilities Act. The one problem has in fact led to the other. While OCWA at the provincial end of the water industry has been put on a reasonably sound footing for the future, the Public Utilities Act has gone through no significant change since the 1950s, and does not largely differ from its origin as the Municipal Waterworks Act in 1882.

The principle deficiency of the *Public Utilities Act* is that municipal water utilities cannot operate fully as the self-supporting businesses that they should be. Their surplus revenues can be siphoned off by municipal councils to pay for other municipal services. Privatized municipal public utilities, on the other hand, would get to keep all of their revenues. This outcome is paradoxical. When operated as a public utility, the business does not enjoy dedicated revenues, although this is essential to the ongoing operational viability of the business. When operated as a private utility, the revenues are not at the disposal of the municipal council, but can be taken out by the private owner for the enrichment of their shareholders or other purposes.

The consequences for not addressing the statutory deficiencies of the municipal water industry are not insignificant. Since cross-subsidisation of other municipal activities is permitted, and this will become more prevalent as municipal councils look for new sources of revenue, water rates will have to be higher than they would in the case where the municipality does not take the surpluses. Alternately, the removal of the surpluses leaves the utility with insufficient revenues for improvements and expansion, which is a situation now reaching crisis proportions in the water and wastewater works of the province.

What remains inexplicable in 1996 is that only municipal water and wastewater utilities face a situation where their revenues can be appropriated. The surpluses of municipal electric utilities are not subject to the same treatment. This is a circumstance that the electric industry *insisted on in order to keep rates low*. The difference between water and electricity may be explained by the fact that Ontario Hydro has always been an important counterforce to their ability of municipalities to control the fate of municipal electric utilities. Hydro, which was established in 1906, was structured as a provincial agency with an at-cost rate formula. It is time for similar treatment to be established for water utilities.

Water utilities did not have a provincial agency such as Ontario Hydro to protect the financial integrity of their industry until the OWRC was created in the late 1950s. The latter agency was established on lines similar to Ontario Hydro, as a self-contained financial entity. But the OWRC was overladen with public policy objectives that eventually submerged the business needs of the provincial water industry. After the OWRC was absorbed into the Ministry of the Environment, the municipal side of the industry never enjoyed a provincial protector.

Now that OCWA has rescued the business operations that were originally in the OWRC from the political considerations of the Ministry of Environment, the industry on the provincial end is financial problem as the municipal water utilities. The NDP provincial government, motivated by its own financial needs rather than the long-term best interests of the water industry, made it possible for the province to have access to OCWA's surpluses. The provincial and municipal water industries should have the same financial freedom that electric utilities have always had from their respective provincial and municipal governments. This outcome is consistent with the user-pay economic philosophy of the current provincial government.

While the creation of OCWA is a progressive development in that the business of water and wastewater were moved "off-budget," the manner in which the agency was equipped for the twenty-first century has the potential for complications. The government's ability to absorb OCWA's surpluses is the most serious concern, but not the most visible and possibly not the most threatening to its business autonomy. The agency is subject to many avenues for provincial government policy direction. This ranges from the power to approve bylaws through to the issue of directives.

Government enterprises like OCWA should have clearly defined mandates and then be left to operate at arms length from the government. Otherwise, their business objectives are compromised by political considerations. The government should only appoint the directors, and should limit the pursuit of its objectives to the informal influence of the appointment power. This does not mean that the government should stack the board of directors with deputy ministers beholden to the government, which is presently the case. In fact, OCWA and the government could benefit from the expertise available from the judicious appointment of outside directors. The government should appoint, at a minimum, a majority of outside directors with a diversity of backgrounds, including two with experience in the municipal waterworks industry. It should also leave the appointment of the CEO to the board. Beyond the minimum, the government should amend the statute governing OCWA to

remove the government's policy-making powers for the agency, and until that times should refrain from exercising its prerogatives.

Like OCWA, the municipal side of the water industry needs to be organized with full business autonomy from municipal councils. Water authorities not only need control of all their revenues, but they also should be administered without policy interference from their respective councils. This is the only sound basis for public utilities to operate, and the only fair basis for comparing their merits with private municipal franchise utilities. For these reasons, the waterworks section of the Public Utilities Act needs to be amended to leave the municipal water industry on a sound foundation to serve its customers in the twenty-first century.

Part 4. The Perils Of Privatizing Ontario's Water Utilities

While privatization may be appropriate for some government functions, the mythology of private ownership's superiority over public enterprise is severely tested in the case of water utilities. When examining the effects of the creation of private water utilities, three negative outcomes are immediately apparent. First, customers do not receive benefits in the form of lower rates, improved service, or greater accountability. Second, private monopoly ownership of water utilities weakens the long-range planning and public policy capability of local governments. Third, regulation of private monopolies, contrary to public perception, works primarily to ensure company profitability, and only secondarily to ensure equitable rates.

The current interest in privatizing water utilities mistakenly assumes that water is just another a private commodity to be bought and sold. Not only is water an essential service required by everyone in daily living, but it is also a precious resource ingested in the body for sustenance. For these two reasons, the provision of water services is different in kind from the exchange of commodities, and even other natural resources. The result is that the structure of incentives in private companies, and especially private monopolies, runs counter to the basic interests of water customers -- a safe and reliable source of drinking water.

In this Part the incentives and logic of privatizing the municipal public water industry in Ontario will be examined from the customers' perspective. Since the privatization of water utilities in the United Kingdom represents one of the most extensive forms of privatization of this kind, it will be drawn into the analysis for illustrative purposes. The evidence from this misguided remaking of a public good into a private commodity clearly demonstrates that water utilities must be owned and controlled by public authorities that are responsive to local customers.

4.1 Private Monopolies and Public Goods -- faulty logic

The current structure of Ontario's municipal water industry reflects the natural monopoly characteristics of the business. Within most municipalities, a single publicly-owned water supplier exists. The capital-intensive nature of the infrastructure, and the unnecessary duplication that would occur if there were competing systems, means the most economically efficient form of organization is a single monopoly supplier in each jurisdiction. This has served Ontario well for over one-hundred years.

Since the water industry is a natural monopoly service, customers are bound to a particular water supplier. They have no "exit" to other suppliers. They can only move away from that jurisdiction. Where there is no exit, customers need "voice" all the more. The central questions, then, are: would customer interests be better served by a private monopoly or a public monopoly? In which case would monopolistic practices and pricing result? And, in which case would customers have "voice" sufficient to counteract the lack of "exit"?

4.1.1 Privatization of Water Utilities -- a critical dialogue

While privatization is not without its merits, the general logic and incentive structure of private monopolies is detrimental to customers' interests in the case of water utilities. Within a natural monopoly context, where customers are restricted to purchasing water services from one private utility, there simply is no compelling incentive for the private company to transfer savings from new efficiencies, if there are any, to customers. On the contrary, private water monopolies have every incentive to extract excessive rates and charges from customers in order to increase profits. A

privately-owned company has a greater motivation to exploit its monopoly power for commercial purposes than reward customers with lower rates.

The general arguments in support of privatization nonetheless paint a much different picture of the outcome. To evaluate the general logic that privatization generates benefits for customers, a comparison of privatization in theory and water utility privatization in practice can be understood as follows [with the "theory" expressed in Roman and the "practice" expressed in Italics]:

- Theory: Private companies have a greater incentive to produce goods and services in the quality and quantity that customers prefer than do publicly-owned companies, because the latter has no profit motivation. Companies which succeed in developing innovative new products and services earn profits and grow; less successful firms whither and die.

 Practice: This would not be the outcome of water utility privatization because product innovation and product development are limited by the nature of the good and service. The needs of water utility customers are basic and water is not a good where innovation will remake its industry.
- Theory: Privatization brings financial discipline to a public utility business through costcutting measures such as the rationalization of staff and streamlining of business functions.

 The savings generated by this new management orientation are passed on to customers in the form of lower rates and improved service. Practice: Public water utilities operate on an atcost, not-for-profit basis, and have the advantage of responding to customer needs through regular elections and open meetings. Any savings through privatization would come at the

expense of water quality and reliable service, and would be returned to shareholders rather than customers.

- Theory: Management's objective in a private company is to improve product quality and customer service in order to gain market share. With customers as its motivation, management will pass on any cost-saving to customers in the form of rate reductions and/or improved service. Practice: Since customers of water utilities do not have the option of switching water suppliers, private monopolies do not have to face market forces, and thus have little incentive to provide extensive, customer-oriented services. Private water monopolies would be loathe to increase service even where they can pass the costs on to customers.
- Theory: Managers of privatized companies will seek increased efficiencies in production costs through the most competitive terms from industry suppliers. The interests of managers of private companies are tied to the performance of the company. *Practice: While seeking increased efficiencies is also true of public utilities, the benefits in the case of private utilities would fall to shareholders rather than to captive customers.*
- Theory: Since shareholders move their investments from one company to another in search of the largest return, private companies have to be well run or investors will overlook them.

 Practice: While investors have the mobility to abandon private water companies, customers lack the capability to move their homes and business in search of other water suppliers if they are dissatisfied with rates or service. Management's primary interest is securing the largest

possible return for its investors, which in the case of private monopoly water utilities does not work to the advantage of customers.

- Theory: Private companies make more optimal choices when raising capital, whether in markets or through rates, for their financing requirements. This ensures that existing customers do not pay unnecessarily for future improvements and expansion through increased rates. Practice: In the absence of a competitive marketplace for private water utility monopolies, captive customers will be a vehicle for increasing returns to private investors. Where capital can be raised through customers in the form of increased rates and new service charges, private companies will ensure that this occurs to the best advantage of investors and shareholders.
- Theory: Private companies have greater business flexibility than publicly-owned companies, and thus do not make political calculations or face political pressures that can lead to a poor allocation of economic resources. *Practice: Water utilities are natural monopolies, and thus even a private water company will be subject to political scrutiny like a public water utility, although it would not be as politically responsive and accountable to customers.*
- 8) Theory: Privatization places the business operations of government where there is business expertise, and therefore it is beneficial to the customer. *Practice: Water utilities, whether public or private, will always be subject to public policy considerations. Privatization of water utilities does not absolve government of political responsibility for their operation.*

In essence, the arguments supporting privatization of water utilities suggest that the profit maximization incentive works to the advantage of customers. While this may be true in a non-monopoly situation, profit maximization -- not serving the customers' interests -- is clearly the driving force behind private monopoly ownership of water utilities. This is patently the case in the experience with privatization in the United Kingdom (UK).

4.1.2 Privatization of Water in the UK -- a horror story

The exploitation of monopoly power is precisely what has occurred with the creation of private water monopolies in the UK. Profits have steadily increased since the ten privatized regional water authorities were established in 1989. For example, in the first full year's experience with privatization, 1989-90, profits increased by 90 percent. By 1991-2, profits were up 137 percent. These figures represent the largest increase of all the privatized UK utility industries -- water, gas, electric -- over the same time period. As a result, share values of privatized water companies have swelled dramatically.

While profitability has soared under privatization, the rate increases that have accompanied the industry's transformation have been exorbitantly high. Water rates for customers of the privatized companies increased by an average of 26 percent by 1991-2. A typical residential water bill has climbed from £48 (\$96) annually in 1988 before privatization to £230 (\$460) in 1995.

Despite the profits and the rate increases, the UK experience with providing customers a reliable water supply under privatization has been disastrous. During the summer of 1995, many customers -- including the elderly and disabled -- had severe water restrictions imposed on them.

Yorkshire Water, a private monopoly in the western region of England, actually instituted rotating

cut-offs on all water use by residential customers. This was no small inconvenience. Over 600,000 people were affected.

The paradox of the Yorkshire Water situation is that the company was making record profits at the time, but had not made investments to avoid shortages. Moreover, with more than 25 percent of its water supply (72,107 gallons per minute) leaking from old water mains in need of repairs,

Yorkshire Water was not addressing its business obligations to its customers. This company's behaviour is not an anomaly. The failure to make necessary improvements is true of all the UK's private water monopolies. While customers pay dramatically increased water charges, leakage totalling over 600,000 gallons per minute is allowed to continue.

In the UK case, service quality has also suffered. For example, expensive water metering technology is being introduced against the stated preferences of customers, and at their expense. Estimates for the cost of installing meters suggest that domestic water rates will increase the typical household water bill by £30 (\$60) annually as a result. And partly because of rate and other increases in charges, water disconnections climbed 177 percent by 1992. To make matters worse, the private monopolies charge customers anywhere from £25 (\$50) to £80 (\$160) to terminate their water supply. The money has to be paid, obviously, before reconnection proceeds.

Estimates show that investment by the UK's private water companies in improvements and expansion is lower than required for safe and reliable supplies of water. In Yorkshire Water's case, it invested only £11 million (\$22 million) in repairing leaks in 1994 when in that same year its profits exceeded £142 million (\$284 million). Overall, the UK's private water firms had cut rather than increased investment in water supply improvements by an average of 20 percent by 1994. Industry analysts in the UK reason that this cut in investment was largely responsible for the 1995 water crisis.

The experience in the UK with business decision-making is a powerful lesson for other jurisdictions considering privatization. During the 1995 crisis, North West Water actually sold four of its reservoirs to private land developers. This led to major shortfalls in available water supply, and thus resulted in severe water restrictions for North West's customers. The shortage was compounded by the company having made the sale knowing that its existing water mains were leaking over 109,781 gallons of water per minute.

The 1995 water shortage in the UK also revealed that major logistical and coordination problems between the private monopolies and the government are the result of privatization. In the middle of the crisis, the cabinet minister responsible for the environment department did not know the location of the reserve water supplies or how much water capacity was still available. The minister also did not know that some water authorities in Scotland were exporting water to Spain instead of assisting with needs in England.

Non-core investment activities of the UK's large private water monopolies also reflect misplaced priorities. Some of the companies have made large investments in business interests outside of the water industry entirely in order to increase their earnings. Most of the private water companies have diversified their business operations into non-core businesses. The glaring example is North West Water, the recently privatized company that sold its reservoirs. It paid £1.8 billion (\$3.6 billion) to purchase Norweb, a regional electricity distribution company in the UK, in the fall of 1995, the same year as the water shortage. North West's obvious desire is to establish a monopoly over both water and electricity distribution. While there are advantages to joint utility administration, under private ownership the benefits would fall to shareholders rather than customers.

Expanding non-core business may serve the shareholders' interest, but is of dubious value to water customers. It diverts the company's attention away from the basic purpose of a water utility:

the safe and reliable supply of clean drinking water. Moreover, poor investment decisions are shouldered by water customers through increased rates, cuts to services, or both.

Executive and management compensation, the reward for increasing profits and share value, is another hidden cost of privatization. By 1992, the highest paid officials of the **Southern**, **Welsh**, and **Yorkshire** water companies had received salary increases of 209 percent, 74 percent and 59 percent respectively since privatization. In 1995, the highest paid official at **North West Water** earned £360 thousand (\$720 thousand), and received another £1.3 million (\$2.6 million) in stock options.

The evidence from the UK indicates that shareholders and executives, rather than customers, have been the beneficiaries of the privatization of water companies. Rates have increased dramatically, service has declined considerably, and improvements and expansion have been neglected, but shareholders and company executives have made millions in profits and compensation.

4.2 Regulation of Private Water Utilities -- protecting whose interest?

Regulation is often negatively characterized as an unnecessary government intervention into the business affairs of private companies. While government regulatory agencies do set and enforce the parameters for commercial behaviour, the effect on business is not the negative picture portrayed in business circles and journals. Regulation provides financial stability for private companies. Indeed, historically, it has ensured the profitability of companies irrespective of their business acumen and customer service practices.

In private utility regulation, there are of **two types of regulation** possible: economic and social/environmental. *Economic regulation*, for its part, focuses on the economic impact of the companies (.e.g., their monopoly practices, competitive structure, contribution to economic growth)

and the financial management practices of the companies (e.g., their rate of return, pricing, and productive efficiency). *Social/environmental regulation*, on the other hand, centres on those areas of business activity that directly affect customers and society (e.g., information provision, service standards, customer treatment, product quality, and environmental impacts). By law or by practice, regulation can encompass one or both the economic and social/environmental forms.

4.2.1 Private Water Utility Regulation

When regulation is applied in the private water utility business, its predominant form is the narrow, economic approach. The central goals are controlling prices and monitoring capital investment targets of the private companies. The regulator, however, is not given the formal powers to determine the capital structure of the industries. Regulation works explicitly to the advantage of shareholders over customers.

Under the economic regulation focus, the regulator's obligation to protect the customers' interests is secondary. It only arises in terms of the customers' interest in the rate structure. Social and environmental goals, as well as any long-term policy development or planning, play a less than significant role in the regulation of private water monopolies.

There are two variants of economic regulation, with the American variant simply based on a rate of return and the British variant know as "price cap" regulation. Rate of return regulation is better understood as a "cost-plus" system, and thus its obvious deficiency is that there is no incentive for private companies to seek efficiencies. Moreover, the return is on invested capital, and thus the form of regulation may encourage unnecessary capital investments.

As a counter to the weaknesses of rate of return regulation, price cap regulation was invented. In essence, a company's rates under price capping are calculated as the inflation adjusted

Part 5. Municipal Public Utilities: A Political Geography

The most striking feature of the political geography of Ontario's municipal public utilities is how much room there is for their expansion and growth. An examination of the tables in **Appendix Four**, which outline **responsibilities for water**, wastewater, and electric service by municipality, makes this clearly evident. Information drawn for the political geography analysis of this Part is presented in three perspectives -- numbers of providers by public utility type, providers in relation to existing municipal electric utilities, and the membership of the Ontario Municipal Water Association (OMWA).

The potential for growth in the public utility sector exists on two fronts. The first is the overall number of utilities. The second is the integration of different types of utilities in individual municipalities -- especially water, wastewater, and electricity -- into joint public utilities commissions.

On the overall number front, there is activity possible on increasing the total number, and there are important advances that can be made through utility amalgamations. In the latter scenario, bringing smaller utilities together into larger units may decrease the overall number, but the utilities end up being stronger and more viable. An example of this occurred alongside the recent creation of the town of New Tecumseth in Simcoe County.

On integration of different utilities into joint public utilities commissions, there is a great deal of room for growth. The merger of municipal water, wastewater and electric power utilities into joint public utilities commissions likewise serves to strengthen the utility sector.

While there is little or no room for change in numbers of public utilities in regional municipalities -- (Metro Toronto, Durham, Haldimand-Norfolk, Halton, Hamilton-Wentworth,

full cost of the utility service, less a fixed percentage (less than the inflation rate) to encourage productive efficiency. In practice, however, price cap regulation has not been substantially different from rate of return regulation because regulators have made similar calculations in what are determined to be acceptable costs.

This regulatory focus is clearly evident in the case of the UK water industry. The interests of private company shareholders have been made explicit in the governing legislation. The regulator is obliged to secure reasonable rates of return on the companies' invested capital. The purpose is to permit the companies to carry out their business function with sufficient capital. In short, regulation ensures profitability, not customer protection or service.

A major difficulty in regulating private monopolies effectively is that the regulators are at a disadvantage when attempting to assess the business plans of private monopolies. The regulator is reliant on the depth and the veracity of the information supplied by the private companies. It does not have access to their strategic business decisions, let alone the detailed financial information the companies use to make their investment decisions. *The regulator is at a distinct information disadvantage*.

The weaknesses of economic regulation create the wrong incentives for powerful private monopolies, at least in terms of water quality and customer service. The companies can argue that their duty to provide a reasonable return to shareholders requires investment into non-core business areas, and thus expenditures on improvements and expansion can be secondary. North West Water in the UK is a case in point. Its purchase of a regional electric company occurred at a time when it needed to make massive infrastructure expenditures to ensure a safe and reliable supply of water to its primary customers. This may be justified on the grounds that such investment is needed for

financing capital projects at some future date, but private companies have an interest in not making public the full scope of their business activities.

When poor investment decisions are made by large and powerful private water monopolies, it is the water customers who pay in the end. This has been the case in the UK. Overall, the decline in investment in necessary system improvements has resulted in millions of gallons of water being left to leak from old water mains. While the water regulator could be blamed for not scrutinizing the activities of the private monopolies in more detail, this temptation would be misdirected because it fails to appreciate how the regulator's limited powers affect the incentives in the industry.

4.2.2 Regulating Franchised Utility Privatizations

While franchise agreements have always been possible in Ontario's municipal water industry, they have only recently gained attention. The interest comes largely from municipal councils, not water commissions. Rather than establish water commissions which are naturally businesslike in their orientation, the councils seek to divest themselves of all responsibility. And even where autonomous water commissions are in existence, the councils seek to franchise them to reap the financial windfall. Regulating private water utility franchises is a potential minefield of political complications and unknowns.

The problem with regulating franchised water utilities is that the *regulatory regime is more* informal than in the case of outright private ownership of the utilities. The regulator is most often a department of the municipal government that is given a specific set of public policy objectives related to the management, operation, quality and social and environmental impacts of water systems. As a result, the regulation is largely based on checking performance obligations in the franchise contract.

Franchising agreements are established in the following manner. Municipalities call for tenders for the operation of the utility and private companies make bids. When a franchise is granted for the water operations of a municipal government, the company obtains a time-limited monopoly control over all or part of the system as specified in the agreement. When the agreement lapses, the municipality must either reassume control, call for tenders for the franchise, or renegotiate the terms with the existing private company.

The problem with franchising water utilities to private companies is that it carries political costs to the municipality. If the private company is unresponsive to customers, say for explaining excessive rates, it is the municipal councillors who are held responsible by the water customers.

Municipal governments cannot effectively deflect this responsibility because the customers know who has sanctioned the private monopoly, and the customers will look to the municipality for appropriate action.

The municipality itself faces planning and other problems as well when the private company is reluctant to cooperate with the municipality's objectives. Moreover, when this situation is outside the terms of the franchise agreement, the municipality is responsible for financially compensating the company, and thus ends up cross-subsidizing water customers.

Franchising water utilities can also create disincentives for the private company to undertake necessary improvements or expansion of the water system. When the franchising agreement is nearing its end, there is little reason to make necessary investments. Even if the company can successfully renegotiate the franchise agreement, it has little or no incentive to make capital investments. To do so would enhance the municipal government's negotiating position because more value has been added to the water system.

supply, management of environmental effects, and industrial development. In essence, the well-being of current and future generations of customers is integrally connected with the direction of water utility policy. Responsibility for the vital social, economic and environmental policy issues in the water industry should remain under the control and ownership of public water utilities.

Where Ontario's municipal water utilities are an important manifestation of democratic accountability, private monopolies remove any form of democratic accountability to the customer. Although regulatory agencies and government departments are called upon to fill the vacuum, their primary task is the economic or narrow form of regulation. In theory, they have the power to structure and direct the water industry, but in practice their real concern is the shareholder rather than the customer interest. The result is that water quality and rates are dictated by private market forces.

Allowing private market forces to shape the course of Ontario's water utility systems is equivalent to abandoning the strategic control government has over the industry. Water is a collective and indispensable public good that everybody needs in order to live. Long-range planning and policy development should not be subject to forces that place profits above customers. The provision of water must continue to be viewed as an essential public service. Only in this way, will adequate provision for future generations be ensured and the exceptional record of water quality, service, and at-cost rates be maintained.

In the case where the company is going to lose its franchise, any capital expenditures it makes near the end of the franchise would be at the expense of profits. The new franchise operator would then have the upper hand with the municipality because of the cost of necessary and immediate capital improvements. And if the municipality wants to end its franchising of the utility, it would have to accept the system regardless of its physical condition, and would then have to make the capital expenditures itself.

Ironically, Yorkshire Water and North West Water, two of the major players in the newly privatized water industry in the UK, are actively seeking expansion in Ontario and other North American jurisdictions. Presumably, these expansion forays are being launched with capital raised at least in part from UK water customers. Indeed, both Yorkshire Water and North West Water are part of consortia bids for a large trunk water line in York Region, on Metropolitan Toronto's northern border.

While this example only concerns a portion of York Region's water supply rather than a franchising of its whole water system, franchising has been made much easier in Ontario as a result of the provincial government's Bill 26 -- the Savings and Restructuring Act. Whereas referendums of electors had to be held in the past, this is no longer the case. (See the discussion of the legislation in Part 3). Franchising whole systems represents a fundamental shift in the nature of municipal government services. Franchising should not proceed without a full cost-benefit analysis comparison with the public utility concept.

The regulatory challenges of ensuring that suitable infrastructure investments are made for a safe and reliable water supply are not insignificant under franchised water utilities. Since the challenges are negotiated in the franchise agreement, the full cost of franchising must include the long-term implications of contract provisions, including failure to perform and cancellation

provisions. The municipality cannot absolve itself of political responsibility for the water supply simply by franchising out its operation. The municipality remains the focus of customer complaints.

Regulatory monitoring costs are hidden costs of franchising water utilities.

4.3 Public Water Monopolies -- serving the customers' interests

Customers' needs and concerns with respect to water supply are basic -- a safe, reliable, and affordable supply of drinking water. For this reason, the purported benefits generally claimed for privatization, such as the development of innovative new products, are simply not applicable to Ontario's municipal water industry. Public water monopolies, in contradistinction, have a clear understanding of what their customers require from water services. Since their business mandate is as focused as the customers' interest is basic, they do not engage in non-core business activity.

Public monopolies in water services have no incentive to extract the monopoly rents that private companies seek from customers. On the contrary, since they are self-financing, not-for-profit organizations, their basic mandate is fundamentally different. The motivation to increase rates above costs or to introduce unnecessary new services is muted in public monopolies. They exist to provide an essential public service, drinking water, on an at-cost basis. *Profit maximization is not a goal of public water utilities*.

Public water utilities are accountable through elected commissioners or municipal councillors and open business meetings. Rate increases or service changes have to pass tests of political accountability. It does not serve the interests of elected commissioners or municipal politicians to be responsible for unnecessary rate increases.

When and if new services require that additional costs be imposed, customers can have input into the politically accountable decision-making of public utilities. Customers can affect rates and

service quality by voicing their concerns to elected officials, by making submissions to the commission meetings, or by voting the commissioners out of office at the next election. While customers can lobby private water monopolies, the accountability of private companies to shareholders diminishes the effectiveness of customer pressure, especially because the company's officers are not elected.

Publicly-owned water utilities do not suffer the coordination problems in long-term and public policy planning that are the case with private utilities. Since the privacy of the business information of public utilities is not an issue, a breakdown in communication and coordination is less likely. In addition, public authorities can more adequately track developments that may lead to crisis conditions in the first place. Their paramount responsibility is maintaining sufficient and safe water supplies, and they have no outside, private business objectives. A private water company's overriding concern is profit maximization, not public policy planning.

Moreover, in the supervision of public water utilities, there is no need to ensure profits for shareholders, and thus no extraneous priorities are tolerated for the public water industry. *The overriding commercial imperative is the safe and reliable supply of water to the customer*. Since the actual utility is either a department or commission of municipal government, there are no barriers to receiving the information necessary to make assessments and evaluations related to the water system. This makes the public system more efficient and effective than a private system.

4.4 Democratic Accountability versus Private Monopolies

Should Ontarians place their water resources and the quality of their drinking water in the hands of unaccountable private companies whose primary goal is maximizing profits? The privatization of water utilities impacts directly upon customers in the following ways: rates, quality, security of

Muskoka District, Niagara, Ottawa-Carleton, Peel, Sudbury, Waterloo, and York) -- there is room for consolidations of different utilities into public utilities commissions.

An examination of the 1995 Ontario Municipal Directory, published by the Association of Municipal Clerks and Treasurers of Ontario, reveals 785 municipalities in Ontario that have functional responsibilities. These are the regions, cities, towns, villages, and townships that perform services, and thus this number does not include the older style county governments and the northern districts that do not perform services. Police villages, which are not in the directory, are not included in this total. Where they do have water, wastewater or electric functions, they have been included in the figures for the township where they reside.

While the analysis of the numbers provides an excellent picture of Ontario's municipal public utilities, the numbers are only a good approximation. The primary reason for this qualification is that the numbers do not account for municipalities that have public utility services provided to them by neighbouring municipalities. Another lesser reason is that the information on water utilities is based on the assumption that where a PUC exists for electricity, it also performs the water function in the municipality. The wastewater function is assumed to be run by the municipality unless information specifically indicates that it is run by a PUC. (See the explanatory notes accompanying the tables for the reasons for these assumptions).

5.1 Water, Wastewater, and Electric Service

Of the 785 municipalities in Ontario, there are 97 within the regions -- 12 regions and 85 lower-tier municipalities within the regions. When these 97 are deducted from the total number, there are 688 municipalities within the older county municipal structure or in the northern districts. Since these

municipalities have gone through little or no change in recent years, they are the ones with the potential for expansion and growth on the public utility front.

The arrangement of public utilities in the province in regions and elsewhere can be best seen by organizing their numbers into the following categories of prevalence: water; wastewater; water and wastewater; and water, wastewater and electric.

5.1.a Municipal Water Service

All 12 regions perform water services, and of these 6/12 perform all the water functions, 2/12 have a near exclusive control, and 4/12 share responsibilities roughly on a wholesale/retail service basis with 36 lower-tier municipalities. One lower-tier municipality, Huntsville, presently performs the water function itself.

Of the 688 municipalities outside the regions, 342 provide water service to all or part of their municipality, and another eight unorganized municipalities do the same. As a result, 346/688 have no municipal water service, although a portion of this number may get water service from a neighbour. The group without water service is made up of 6 towns, 128 villages and 312 townships.

5.1.b Municipal Wastewater Service

All 12 regions perform wastewater services, and, like the case of water, 6/12 perform all the wastewater functions, 2/12 have a near exclusive control, and 4/12 share responsibilities roughly on a wholesale/retail service basis with 35 lower-tier municipalities. One lower-tier municipality, Huntsville, presently performs the wastewater function itself.

Outside the regional municipalities, there are 290/688 municipalities that perform wastewater functions for all or part of their municipality, and there are another eight providers in unorganized

municipalities. As a result, there are 398/688 municipalities that do not have wastewater services. This total is made up of 15 towns, 40 villages, and 343 townships.

5.1.c Municipal Water and Wastewater Service

While all of the regions perform water and wastewater functions, and 36/85 of the lower-tier municipalities share in the responsibility, 255/688 municipalities provide the same in the older counties and northern districts. There are another 7 unorganized municipalities that provide the same dual function. Thus, 433/688 may provide one or the other, but not both water and wastewater.

5.1.d Municipal Water, Wastewater and Electric Service

Of the lower-tier municipalities in the 12 regions, 24 provide all three services -- water, wastewater, electricity. While 36/85 perform water and wastewater, the number is smaller for all three utility services because of the special case of Waterloo Region. In 11/12 regions electric service is a lower-tier responsibilities, but in Waterloo it is provided on a quasi-regional basis, with three utilities serving the seven lower-tier municipalities in the region. It is also the case that **Ontario Hydro** is the provider in 17 rural municipalities within the regions.

Outside the regions, there are 179/688 municipalities that perform all three services of water, waste water and electric service in some fashion.

5.2 Municipal Electric Utilities and Public Utilities Commissions

There are 307 municipal electric utilities (MEUs) in Ontario organized under the provisions of the *Public Utilities Act*. All but one, Sault Ste. Marie, receive their power from Ontario Hydro. There

are also another six privately-owned utilities in municipalities -- Comwall, Fort Erie, Gananoque, Balmerton, Red Lake, and Smooth Rock Falls.

MEUs are a good starting point for analysing the potential integration of different types of public utilities in the province because they are the **most financially autonomous** and generally the best organized. Moreover, there are more of them.

Under the provisions of the *Public Utilities Act*, municipal electric utilities must be administered by municipal commissions autonomous from municipal councils. The only exceptions are in townships and police villages, where MEUs can be administered by elected commissions or administered directly by the council or trustees respectively. MEUs can also be a **public utilities commission** (PUC) that incorporates two or more utility functions, water and electricity being the most common combination. The autonomous commission or PUC must also be elected under the provisions of the *Municipal Act*, although in municipalities with a population of 60,000 a MEU can be appointed by the municipal council.

Among the 307 MEUs, there are 157 single-function commissions, 102 PUCs, and 46 MEUs operated by the municipality directly.

Within the 12 regional municipalities there are 63 MEUs, of which 62 are single commissions; and Scarborough is the lone PUC with electricity and water. (Oshawa has a PUC with electricity, but for these purposes is considered a commission because Durham Region performs the water and wastewater functions exclusively.) Of the MEUs in regions that exist where the lower-tier municipality also performs the retail portion of the water and wastewater function, there are 25/63 that could be expanded into PUCs by being assigned the functions presently assigned to the municipalities. And the Scarborough PUC could be expanded if it took over the wastewater functions of the municipality.

There are 102 public utilities commissions in the province performing at least electricity and water functions, of which only Scarborough PUC is in a regional municipality. This leaves 101 in the older counties and northern districts. Of these PUCs, 90/101 exist where the municipality also performs wastewater functions that the PUC could take over. In the two cases where it could be determined, Clinton and Mount Forest, the PUC already performs all three functions of water, wastewater, and electricity

When the 62 single-function MEU commissions in regions are deducted from the total number of commissions, 95/157 are in counties or district municipalities. Of these MEU commissions, 73/95 exist where they could take over both the water and wastewater functions of the municipality. Another 10/73 MEUs exist in municipalities where the council only provides the water supply, and these 10 could be expanded into PUCs. There are also 7/73 where the municipality performs wastewater functions, but not water, where the same would apply. The remaining 9/73 MEUs exist where the municipality performs no water or wastewater functions.

In the case of the MEUs operated directly by the municipality, there is also room for integration. Of these, 20/46 operate where the municipality also provides water and wastewater functions; 11/46 operate where the municipality performs only water responsibilities; 2/46 operate where the municipality performs wastewater functions, but not water. Only 13/46 exist where the municipality does not perform any water or wastewater function.

5.3 Ontario Municipal Water Association -- membership issues

The OMWA currently has a **membership of 217** made up of water and/or wastewater service providers, whether they be municipalities, PUCs, or water commissions. All 217 members perform some water service; 97/217 members are in municipalities where the council performs both water and

wastewater functions; 30/217 are in municipalities where the council provides a water service only; 89/217 members are in municipalities where PUCs provide water and electricity; and 5/217 are in municipalities where dedicated water commissions exist. Of the 568/785 municipalities in the province that are not members of the OMWA, 166 perform water and/or wastewater functions. By this count, there is substantial room for growth in the membership of the OMWA.

In the two-tier regional municipalities, there are 97 municipalities in total, including the 12 regional governments and 85 lower-tier municipal governments. Although 12/12 regions perform water and wastewater functions, only 6/12 regions are members of the OMWA. Of the 36/85 lower-tier municipalities in the regions that perform water and wastewater functions in conjunction with the regions, only 19/36 are members of the OMWA.

In the organized municipalities in the old counties and northern districts of the province, 192/688 are members of the OMWA. Of the 496 municipalities that are not members, 138 perform some water or wastewater service, and thus have reason to become members of the OMWA. This breaks down further into 6 cities, 26 towns, 40 villages, and 67 townships. There are also 6 unorganized municipalities that perform some water or wastewater functions.

5.3.a Regions -- Non-members

Durham, Halton, Hamilton-Wentworth, Muskoka District, Niagara, Peel.

5.3.b Cities -- Non-members

Cambridge, Cornwall, Borough of East York, Etobicoke, North Bay, North York, Orillia, Port Colborne, St. Catharines, North Bay, Sarnia, Timmins.

5.3.c Towns -- Non-members

(Niagara Region) Fort Erie, Grimsby; (York Region) Newmarket, Vaughan, Whitchurch-Stouffville; (Bruce Co) Chesley, (Dufferin Co) Orangeville, (Essex Co) Harrow; (Hastings Co) Deseronto; (Lanark Co) Almonte; (Leeds and Grenville Co) Kemptville; (Prescott and Russell Co), Rockland; (Algoma) Blind River, Bruce Mines, Thessalon; (Cochrane) Hearst, Smooth Rock Falls; (Kenora) Kenora; (Manitoulin) Gore Bay, Little Current; (Nippising) Mattawa, Sturgeon Falls; (Parry Sound) Kearney; (Rainy River) Fort Frances, Rainy River; (Sudbury District) Espanola, Massey, Webbwood; (Thunder Bay) Geraldton, Longlac; (Timiskaming) Charlton, Englehart, Haileybury, Latchford.

5.3.d Villages -- Non-members

(Bruce Co) Lion's Head, Lucknow, Mildmay, Paisley, Tara, Teeswater, Tiverton; (Grey Co)

Chatsworth; (Hastings Co) Deloro, Madoc, Marmora, Tweed; (Lambton Co) Arkona, Oil Springs,

Wyoming; (Lanark Co) Lanark; (Leeds and Grenville Co) Merrickville, Westport; (Middlesex Co)

Lucan; (Northumberland Co) Colborne; (Perth Co) Milverton; (Peterborough Co) Havelock,

Lakefield, Millbrook; (Prescott and Russell Co) Alfred, l'Original, Plantagenet, St. Isidore; (Prince

Edward Co) Bloomfield; (Renfrew Co) Beachburg, Cobden, Eganville, Killaloe; (Stormont, Dundas,

Glengarry Co) Chesterville, Finch, Iroquois, Lancaster, Maxville, Morrisburg; (Victoria Co)

Bobcaygeon, Fenelon Falls, Omemee, Woodville; (Wellington Co) Clifford, Drayton, Elora, Erin;

(Algoma) Hilton Beach; (Parry Sound) Burk's Falls, Magnetawan, Sundridge.

5.3.e Townships -- Non-Members

(Niagara Region) Wainfleet, West Lincoln; (Waterloo Region) North Dumfries, Wellesley, and Wilmot; (Bruce Co) Arran, Huron, St. Edmunds, (Dufferin Co) East Luther Grand Valley; (Elgin Co) Yarmouth; (Essex Co) Gosfield South, Tilbury West; (Grey Co) Normanby; (Haliburton Co) Anson, Hinden and Minden; Bicroft; Dysart et al.; (Hastings Co) Sidney, Thurlow; (Huron Co) Tuckersmith; (Kent Co) Raleigh, Romney, Tilbury East; (Lambton Co) Sombra; (Leeds and Grenville Co) Edwardsburgh, Front of Leeds and Lansdowne; (Lennox and Addington Co) Ernestown, south Fredericksburg; (Middlesex Co) Biddulph, Caradoc, Delaware, East Williams, Lobo, West Nissouri; (Oxford Rest. Co) Blanford-Blenheim; South-West Oxford; (Perth Co) Downie, Ellice, Elma, Wallace: (Peterborough Co) Harvey, Otonobee, Smith; (Prescott and Russell Co) Cambridge, East Hawksbury, North Plantagenet; (Prince Edward Co) Ameliasburgh; (Simcoe Co) Adjala-Tosorontio, Essa, Oro-Medonte, Ramara, Tiny; (Stormont, Dundas, Glengarry Co) Charlottenburg, Cornwall, Lancaster, Osnabruck, Williamsburg, Winchester; (Victoria Co) Bexley, Eldon, Emily, Fenelon, Manvers, Mariposa, Somerville, Verlam; (Wellington Co) Eramosa; (Algoma) Hornepayne, Johnson, Shedden, St. Joseph; (Cochrane) Fauquier-Strickland, Glackmeyer, Mattice-Val Côté, Moonbeam, Opasatika, Val Ria-Harty; (Kenora) Ear Falls, Golden, Ignace, Red Lake; (Manitoulin) Assiginack, Billings, Rutherford and George Island; (Nippising) Caldwell, Field; (Parry Sound) Himsworth North; (Rainy River) Atwood, Chapple, Emo; (Sudbury District) Casmir, Jennings and Appleby; Cosby, Mason, and Martland; Rattner and Dunnet; (Thunder Bay) Beardmore, Nakina, Nipigon, Terrace Bay; (Timiskaming) Armstrong, Casey, Dymond, Hudson, Matachewan.

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5.3.f Unorganized -- Non-members

(Cochrane) Moosonee, Hallebourg, Jouges; (Kenora) Masden; (Sudbury District) Broden, Foleyet, Gogoma; (Thunder Bay) Armstrong, Caramat, Rossport; (Timiskaming) Thorne.

Part 6. Key Findings and Recommendations

Part 1. Executive Overview: Public Utilities for the Twenty-First Century

- Ontarians are overwhelmingly opposed to cross-subsidizing general municipal services out of the rates of public utility customers; 77% of Ontarians feel that water rates should only be used to improve the water system, compared with just 19% of Ontarians who feel water rates should be used to pay for other municipal services (and 4% who do not know) -- polling by INSIGHT CANADA RESEARCH for OMWA.
- Ontarians strongly hold the view that water is a public good and not a private commodity; 77% of Ontarians favour water being sold at cost, compared with only 10% of Ontarians who favour water being sold at a profit (and 13% who do not know) -- polling by *INSIGHT*CANADA RESEARCH for OMWA.
- Ontarians are decidedly opposed to privatization of water utilities; 76% of Ontarians favour water utilities being controlled by municipal officials, compared with only 19% of Ontarians who favour water utilities being controlled by private businesses (and 6% who do not know) polling by INSIGHT CANADA RESEARCH for OMWA.

Part 2. The Public Utility Concept -- where, what, how, why?

2.1 Ontario Politics -- the current climate

- the 1995 election represents a public policy watershed, one where a new emphasis is being
 placed on financial transparency, removal of program cross-subsidization, and apportioning
 user fees to government services where possible and appropriate; self-financed water utilities
 complement this new policy environment.
- the new provincial financial philosophy holds that the government that provides the service should be responsible for its financing; as a result, many municipal services are having to be rethought; public utilities, because they are financed on a fee-for-service basis, are of demonstrably continuing value.
- the unintended consequence of the reductions in provincial transfers to municipalities is that some councils are seeking to cross-subsidize their general municipal services out of the dedicated revenues of public utilities rather than getting their own financial houses in order; this desire is at odds with the new policy environment.
- cross-subsidization distorts the true cost of municipal services; even though taxpayers and utility customers are in most instances the same people, taxes and utility rates are calculated

by different methods; the direct accountability of public utilities to the customer complements the new financial climate politically.

2.2 What is the Public Utility Concept?

- public utilities distinguish themselves from other municipal services by operating on a transactional, fee-for-service basis, and by having a distinct, self-contained identity and a functional unity.
- public utilities commissions distinguish themselves from utilities operated by municipal councils and from private utilities by having no competing objectives, public or private.
- when the finances of public utilities are not kept separate from the municipal council's finances, public utilities stop being businesses and become agents of social policy.

2.3 How should Public Utilities be Organized and Governed?

- recommendation: public utilities should be governed by commissions with autonomy from municipal councils to ensure proper lines of service accountability to the public and financial separation from the municipality.
- recommendation: public utility commissions should be elected rather than appointed because this provides unimpeded accountability to the customer and ensures that the business autonomy of the utility will not be compromised.
- recommendation: all of a municipality's public utility functions should be integrated into a single autonomous public utilities commission to capture the natural efficiencies from providing related services, such as those from providing water, wastewater, and electricity together.
- recommendation: public utilities should not be subject to the vagaries of municipal council politics; all municipalities should disentangle their public utilities from their general services for the mutual benefit of taxpayers and utility customers.
- the command and control model and the division of responsibility model are the main ways of
 organizing municipal services; the former places all municipal functions under the control of
 councils, and the latter holds that certain municipal services are better off separately
 administered.
- the general problem with the command and control model is that it emphasizes procedural accountability, which in large, multi-function organizations like municipal governments only serves to diminish innovation and responsiveness; procedural accountability is merely the red tape of bureaucratic behaviour, and does not promote dynamic and creative activity.

- the command and control model's specific weakness in the case of public utilities is that they
 are either subject to insufficient attention or are subject to political calculations that interfere
 with their business priorities; in addition, this model can create policy paralysis, such that
 self-contained municipal functions like utilities cannot move forward independently of the
 council.
- the division of responsibility model promotes competition and rivalry in administrative practices, and thus brings to the fore greater operational efficiencies for both the council and the public utility commission.
- the division of responsibility model enhances democratic accountability, flowing as it does
 from the positive administrative values of efficiency and flexibility; it is not an essential
 principle of local government that a council must be the only democratically accountable
 body.
- recommendation: small administrative units, less bureaucracy and more direct accountability to taxpayers and customers are the way of the future.
- recommendation: in the case of municipal government reform, whether for one jurisdiction or the whole province, the public utility concept should be adopted so that the efficiencies from providing integrated municipal water, wastewater, and electric service can be reaped; the driving force for integration is the realization of cost-effective utility services at no cost to the taxpayers.

2.4 How should Public Utilities be Financed?

- a historic opportunity exists to place public utilities on a sound, fee-for-service financial footing, especially where this does not already exist for water and wastewater services.
- recommendation: public utility rates should be dedicated solely to public utility purposes, and should not be used to cross-subsidize general municipal services; of no less significance, public utilities should not distort their finances by drawing on municipal taxes for additional revenues.
- recommendation: public utility accounts should be managed on a full-cost accounting/full-cost recovery basis, and thus should not rely on provincial or municipal incentive grants; where joint public utility commissions exist, separate accounts should exist for each utility.
- recommendation: as is already the case with municipal electric utilities, public utility surpluses should not be at the disposal of municipal councils for cross-subsidization of general municipal services.
- recommendation: public utility accounts should be managed on an industry standard basis, one that is as uniform as possible from municipality to municipality; they should be kept completely separate from other municipal accounts, and especially should not be meshed with

these accounts just to satisfy municipal accounting needs unrelated to good business practices in public utilities.

- recommendation: public utilities should operate on an at-cost, not-for-profit basis; rates should be neither under-priced nor over-priced, and should not be used to raise capital for other non-utility purposes.
- **recommendation:** public utilities should have the borrowing freedom to select the proper instrument for raising capital, and municipal councils should only be able to limit borrowing when the utility cannot meet the repayment requirements.
- recommendation: wastewater should become a fee-for-service public utility like water and electricity, both to ensure that there is proper financing and to ensure that the customer will be provided the proper information for economic, environmental, and conservation considerations.

2.5 Why is Public Utility Privatization not an Answer?

- customers have no "exit" to other suppliers in both public or private water utilities, but only
 customers of public utilities have "voice" to counteract this lack of "exit"; privatization has
 political consequences because customers of private utilities will seek redress from municipal
 councils.
- privatization causes the utility customers to pay for the utility twice, the first time in rates and the second time in increased rates to pay the franchise fee; the municipality's self-interest in receiving a large franchise fee runs counter to reasonably-priced utility services.
- political responsibility for customer complaints and changes in the franchise agreement will
 fall to the municipal council; regulatory monitoring costs are the hidden cost of water
 privatization.
- private utilities have higher business costs and have no obligation to keep revenues geared to costs, or to keep revenues in the system.
- recommendation: privatization should not proceed without a full and open cost/benefit analysis with the public utility concept, including a full accounting of the consequences of all contract commitments.

2.6 Why are Public Utilities the Answer?

• public utilities complement the new economic climate and the challenges ahead for municipal government by combining a businesslike operation with full public accountability; any restructuring of municipal services should be guided by the best interests of the customer.

- public utilities have no other objective, public or private, than providing their service at cost;
 they do not have to balance the competing pressures at work in municipal budgets and they do not have competing business priorities like private utilities.
- public utilities are major economic actors in the local economy and important contributors to the economic well-being of the municipality; they are good for private business through their facilitation of growth, their at-cost rates, and their attention to customer service.

Part 3. Ontario's Water Industry: Background and Structure

• the municipal side of the water industry has suffered from statutory neglect, save for being hurriedly subjected to privatization as a result of Bill 26, the Savings and Restructuring Act, 1996; the provincial side has suffered from statutory abuse, having been continuously laden with public policy objectives extrinsic to its basic mandate.

3.1 The Water Industry and the Evolution of Provincial-Municipal Relations

- although the provincial government can statutorily dictate the character of the local water industry, the strength of public water utilities is that they are an important expression of local political values and sentiments.
- most Ontario municipalities were created after the passage of the first Municipal Act in 1849, which encouraged local infrastructure spending; the origins of water utilities followed the passage of the Municipal Waterworks Act in 1882.
- at the turn of the century, the provincial government provided financial and administrative inducements for local government services, but water was not subject to this intervention and diminished local control; it was not until the creation of the Ontario Water Resources Commission in 1956 that the provincial government assumed a major role in the water business.
- regional government is a postwar invention designed to enhance economic development by basing planning for services on a larger territory; while water was in most instances made a regional service, electricity was not because Ontario Hydro provided the planning function; municipal opposition meant regional government was established in only twelve jurisdictions.
- currently there is a major adjustment and retrenchment underway in provincial-municipal
 financial and administrative arrangements, which will lead to a reduction in the degree to
 which there is uniformity in municipal services across the province; the provincial
 government will establish priorities, for which dynamic municipalities will opt in.

3.2 The Municipal Water and Wastewater Industry -- statutory neglect

- municipal waterworks were structured from their beginning in 1882 as self-financing entities
 that had their own accounts, although the councils received their surpluses; they also could be
 run by commissions, and this is where the current pattern of three or five commissioners
 including the head of council has its origin; beginning in 1887, water utilities could be
 established by municipal plebiscite.
- the *Public Utilities Act* was passed in 1913 to meet demands for joint public utilities commissions, especially water and electricity after Ontario Hydro completed its transmission lines in 1910-11; PUCs were given a separate legal status from the municipal council, and had to keep separate accounts for each utility; municipal electric utilities had to be run by autonomous commissions, save the case of townships and police villages.
- in 1924, the *Public Utilities Act* was amended to allow municipal councils to set utility rates, but this would be restricted in 1946 to setting rates when existing rates were insufficient.
- during the depression, the *Act* was amended in 1931 to permit the sale of public utilities, although only with the consent of electors, and in the case of municipal electric utilities with the additional consent of Ontario Hydro.
- in 1951 the Act was amended to limit the withdrawal of utility surpluses to that left over after funding a reserve fund for improvements and expansion; thereafter no significant amendments were made to the Act until the passage of Bill 26 in 1996.

3.3 The Provincial Water and Wastewater Industry -- statutory abuse

- the first provincial role in the water industry arrived with the passage of the *Public Health Act*, 1884, which provided for provincial approval of municipal water and wastewater works; the province would not change this limited role until the creation of the Ontario Water Resources Commission (OWRC) in 1956.
- OWRC was mandated originally to develop water and wastewater facilities either on its own
 or in conjunction with municipalities; it was created as a corporation without share capital,
 and was given access to a government guarantee of its debt.
- in 1958, OWRC was given an expanded mandate with many subsidiary public policy functions beyond its primary mandate; its new supervisory responsibility for the water industry extended to approval of all plans, and hearings for all expansions; its new regulatory responsibility included inspection of all facilities and the power to levy fines.
- in 1964 OWRC was brought under the responsibility of the Department of Energy and Resources Management, a new ministerial portfolio.

- as a result of public awareness of environmental issues, the government gave the OWRC supervisory responsibility for all surface and ground water in 1970, not just that affecting the drinking water supply; OWRC power to regulate pollution was also changed to permit the commission to do so with ministerial approval.
- on the eve of the 1971 election, the new premier, Bill Davis, established the Department of Environment, renamed the Ministry of Environment in 1972; the OWRC was dissolved, with the new department given all of its operational and policy responsibilities; in the result, water and wastewater services were moved "on-budget."
- the Environmental Assessment Board was established in 1975, assuming the environment ministry's regulatory responsibilities; the Environmental Appeal Board was established in 1983.
- the Peterson government took a strong stance in defence of the environment, including holding corporate directors responsible for pollution; it came to realize that the policy and operational responsibilities of the environment ministry should be separated, but did not act before it was defeated in 1990.

3.4 The Municipal and Provincial Water Industry in the 1990s

- the political motivation for the creation of the Ontario Clean Water Agency (OCWA) was the desire to move costly items "off-budget," but allowing a self-financed entity to operate with corporate autonomy from the government also made good business sense.
- OCWA's primary objective, like the old OWRC, is to build and operate water and wastewater works for municipalities, or in its own name; it was given the Ministry of Environment and Energy's water and wastewater works without compensation.
- OCWA is mandated to operate on a full-cost recovery basis and can act with the freedom of a
 private company by declaring that it is not an "agent" of the government.
- the government has the power to formulate policy for OCWA, absorb its surpluses, appoint its board of directors, and appoint its CEO.
- Bill 26 allows municipal councils to bypass the requirements of the Public Utilities Act and the Municipal Franchises Act that require plebiscites before disestablishing public utilities and establishing franchise utilities.
- Bill 26 allows municipal councils to dissolve autonomous agencies, boards and commissions, (except school, police and conservation boards); municipal electric commissions have been exempted by regulation while the Advisory Committee on Competition in Ontario's Electricity System is under way.

- Bill 26 permits autonomous boards like public utilities commissions to be moved either to the upper-tier or the lower tier of municipal government if more than 50 percent of the municipalities are in agreement.
- **recommendation:** public water utilities should not be dissolved, transferred to other governments, or franchised without the consent of municipal electors.
- recommendation: the provincial and municipal water industries should have the same financial freedom from provincial and municipal government that has always existed in the electric power industry.
- recommendation: OCWA needs to be free to perform its specified functions without undue political interference; the government of Ontario should appoint a judicious diversity of directors, and refrain from appointing just deputy ministers; the government should appoint a majority of directors from outside government, including two directors with backgrounds in the municipal waterworks industry.
- recommendation: the government of Ontario should in future leave the appointment of the chief executive officer of OCWA to the board of directors.
- **recommendation:** OCWA should not be subject to having its surpluses appropriated by the provincial government, and it should not need provincial government approval to borrow except in instances where the government guarantees the debt.

Part 4. The Perils of Privatizing Ontario's Water Utilities

• the mythology of private ownership's superiority over public enterprise is severely tested in the case of water utilities.

4.1 Private Monopolies and Public Goods -- faulty logic

- the municipal water industry is a natural monopoly because of the unnecessary duplication of services that would result from competition and the capital intensive nature of the industry; in a monopoly industry like water the customer has no "exit" to other suppliers, and thus needs "voice" all the more.
- a privately-owned company has a greater motivation to exploit its monopoly power for commercial purposes than to reward customers with lower rates.
- privatization will not remake the water industry because the needs of customers are basic and the industry is not subject to major innovation.
- any efficiency savings though privatization would come at the expense of water quality and reliable service, and they would be returned to shareholders rather than to captive customers.

- private monopolies do not face market forces and thus would have little incentive to provide new or better customer-oriented services; profit maximization, not customer service, is the driving force behind private monopoly ownership of water utilities.
- the privatization of water utilities in the United Kingdom is a case in point on the exploitation of monopoly power; water profits in the UK have been the highest of all the privatized utilities -- water, gas, and electricity.
- privatized water utilities in the UK have generally not made sufficient investments in improvements, while most have branched out into non-core businesses; logistical and coordination problems between government and utilities are greater with privatization.

4.2 Regulation of Private Water Utilities -- protecting whose interest?

- regulation provides financial stability for private companies, ensuring their profitability irrespective of the business acumen and the customer service quality of the companies.
- economic regulation, as opposed to social/environmental regulation, has predominated in the private water utility business, and in the UK the regulators are required to secure reasonable rates of return on the invested capital of the private companies.
- regulating franchised private utilities is a minefield of political complications and unknowns; the regulator is usually the municipal council itself, and regulation focuses primarily on contract compliance; changes to the contract will be at the expense of the municipality, which would then in effect be cross-subsidizing utility customers through general tax revenue.
- when a franchised private utility is unresponsive to customers, the municipal councillors face the brunt of the customers' criticism because the customers know who sanctioned the franchise; regulatory monitoring costs are the hidden cost of privatization.
- franchising agreements create disincentives for making necessary investments near contract completion because the investments would be at the expense of profits, or they would drive up the value of the franchise if it is to be renewed; this private monopoly behaviour would leave the municipality stuck with a deteriorated utility if it chose to take over the utility at the end of the franchise.
- **recommendation:** franchising should not proceed without a full cost/benefit analysis comparison with the public utility concept; the full cost of franchising must include the long-term implications of contract provisions, including failure to perform and cancellation provisions.

4.3 Public Water Monopolies -- serving the customers' interests

- public water utilities have no motivation to charge rates above cost; profit maximization is not
 a goal; it does not serve the interests of elected commissioners or municipal councils to be
 responsible for unnecessary rate increases.
- customers have "voice" with public water utilities through regular elections and open business
 meetings; they can affect rates by making submissions to the commissioners, and by voting
 the commissioners out of office in the next election.
- since there are no privacy considerations for public utility information, a breakdown in communication and coordination is not the contentious issue it can become with private utilities; moreover, by having no other business objectives, the paramount consideration of public water utilities is maintaining a safe and reliable supply of water.

4.4 Democratic Accountability versus Private Monopolies

- recommendation: responsibility for the vital social, economic and environmental policy issues in the water industry should remain under the control and ownership of public water utilities.
- recommendation: long-range planning and policy development of the water industry should not be subject to forces that place profits above the interests of customers.

Part 5. Municipal Public Utilities in Ontario: A Political Geography

- recommendation: there is great potential for growth and expansion of the public utility sector, especially the water and wastewater industry, and the integration of these two with the municipal electric industry in joint public utilities commissions.
- recommendation: the greatest potential for growth is in the older counties and northern
 districts, which did not experience the municipal reform associated with regional government,
 but even in regions there is some potential for integrating public utilities into joint
 commissions.

Appendix 1

Glossary of Acronyms and Terms

AMCTO Association of Municipal Clerks and Treasurers of Ontario

AMO Association of Municipalities of Ontario

AWWA American Water Works Association

HEPC Hydro-Electric Power Commission (predecessor of Ontario Hydro)

MEA Municipal Electric Association (of Ontario)

MEU municipal electric utility

MoEE Ministry of Environment and Energy

OCWA Ontario Clean Water Agency

OH Ontario Hydro

OMB Ontario Municipal Board

OMWA Ontario Municipal Water Association

OWRC Ontario Water Resources Commission

OWWA Ontario Water Works Association (a section of the AWWA)

PUC public utilities commission

Appendix 2

Key Dates in Ontario's Public Utility Sector

1840	Union Act	creates United Province of Canada
1848	Responsible Government	begins; cabinet chosen from who commands confidence of legislature
1849	Municipal Act	passed; also known as Baldwin Act
1867	Constitution [BNA] Act, 1867	Confederation; creates Ontario
1882	Municipal Waterworks Act	permits municipal water utilities
1883	Municipal Light and Heat Act	permits municipal electric utilities
1884	Public Health Act	establishes water quality standards
1887	Municipal Waterworks Act	begins plebiscites for creating utilities
1906	Power Commission Act	establishes Ontario Hydro
1913	Public Utilities Act	permits joint public utility commissions; permits wastewater as a PUC function
1931	Public Utilities Act	permits plebiscite for sale of public utilities
1949	Leslie Frost	becomes premier of Ontario
1954	Metropolitan Toronto	first regional government established
1956	Ontario Water Resources Act	establishes provincial commission
1958	Ontario Water Resources Act	policy mandate expanded
1959	Energy Resources Act	begins HEPC ministerial supervision
1961	John Robarts	becomes premier of Ontario
1964	Energy and Resources Management Act	begins OWRC ministerial supervision
1967	Pollution Probe	established in Ontario

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1969	Environmental Protection Agency	established in USA
1971	Bill Davis	becomes premier of Ontario
	Department of Environment Act	establishes new department in place of Energy and Resources Management
1972	Government Reorganization Act	establishes Ministry of Environment; dissolves OWRC into new ministry
1973	Power Corporation Act	creates Ontario Hydro out of HEPC
1973	Ministry of Energy Act	establishes new ministry
	Ontario Energy Board Act	Hydro rate review begins in 1975
1974	Water Resources Amendment Act	establishes Environmental Hearings Board; debt and renewal funds transferred to ministry
1975	Ontario Water Resources Act	creates Environmental Assessment Board
1982	Constitution Act, 1982	creates Charter of Rights and Freedoms
1983	Ontario Water Resources Act	permits to Environmental Appeal Board
1985	David Peterson	becomes premier of Ontario
1986	Environmental Statutes Act	increases fines for polluters; penalties corporate directors instituted
1988	Environmental Statutes Act	EAB can fix cost of polluting offenses
1990	Bob Rae	becomes premier of Ontario
1993	Capital Investment Plan Act	establishes Ontario Clean Water Agency and Ontario Financing Authority; Ministry water and wastewater functions moved to OCWA
	Environment and Energy ministries	informally merged
1995	Mike Harris	becomes premier of Ontario
1996	Savings and Restructuring Act	Bill 26 makes public utility privatization and municipal consolidation easier; removes requirement for utility plebiscites

Appendix 3

Attitudes of Ontarians Toward Community Drinking Water Systems

A Report to the
Ontario Municipal Water Association

April 1996

Insight Canada Research
101 Yorkville Avenue, Suite 301 Toronto, Ontario M5R 1C1
Tel: (416) 921-0090 Fax: (416) 921-3903
Ottawa Office Tel: (613) 237-4114 Fax: (613) 237-4305

Executive Summary

- An overwhelming majority of Ontarians display attitudes which express a desire to see community drinking water systems remain discrete, non-profit, publicly controlled operations.
- More than three-quarters of Ontarians (77%) say that the water that comes through their taps should be provided to them at cost.
- There is a strong reluctance among Ontarians to see the money they pay in water rates used for anything other improving the water system. More than three-quarters of Ontarians (77%) say that the money consumers pay in water rates should be used solely for improving the water system.
- There is strong desire present among Ontarians to preserve control of community drinking water systems in the hands of directly elected municipal officials rather than turn them over to private businesses. More than three-quarters of Ontarians (76%) say municipal officials should control community drinking water systems, compared to 19% who say private businesses should control them.

Introduction

Insight Canada Research is pleased to present the Ontario Municipal Water Association (OMWA) with this report based on the findings of a telephone research survey conducted with 1,007 Ontarians 18 years of age or older on March 12 and 13, 1996. Overall results for this study are considered reliable to within ±3.1%, nineteen times out of twenty.

Attitudes Toward Sale of Water

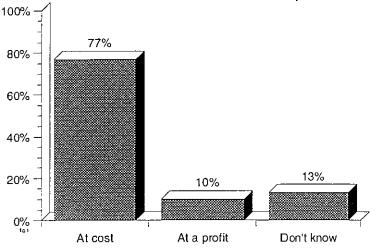
at a Profit

It is clear that the Ontario public does not believe that water is a product or service that can be sold under the same rules as other products in the marketplace.

More than three-quarters of Ontarians (77%) say that the water that comes through their taps should be provided to them at cost.

Should Tap Water Be Sold at Cost or Be Distributed at a Profit?

In your opinion, should the drinking water that comes through your taps continue to be sold to you at cost or should water be distributed to consumers at a profit?



By comparison, only one-in-ten Ontarians (10%) say that water should be distributed at a profit. More than one in ten respondents (13%) say they don't know whether water should be provided at cost or at a profit.

Regionally, residents of Metropolitan Toronto are the most likely to say that water should be provided at cost, with 81% of Metro residents taking that view, compared to 11% who say that water should be sold at a profit.

Attitudes Towards the Provision of Water By Region

			Don't
	At Cost	At a Profit	<u>Know</u>
	%	%	%
Metro Toronto	81	11	8
Metro Belt	79	8	13
Southwestern Ontario	76	10	14
Eastern Ontario	72	8	20
Central Ontario	68	14	18
Northern Ontario	78	11	11
ONTARIO	77	10	13

Residents of Central Ontario are less likely to say that water should be provided at cost (68%) and more likely to say that it should be sold at a profit (14%) than residents of any other region.

Consistent with the regional results, urban residents are much more likely to say that water should be provided at cost than rural residents.

Among urban residents, eight in ten (79%) say that water should be provided at cost, with 9% of urbanites saying it should be sold at a profit.

By comparison, just over six in ten rural Ontarians (62%) say that water should be provided at cost, with 15% preferring to see it sold at a profit.

However, there is a much higher degree of uncertainty among rural residents than urban residents, with one-quarter of rural Ontarians (24%) saying they don't know whether water should be provided at cost or sold at a profit, compared to 12% of urban Ontarians.

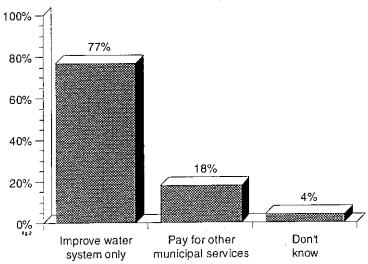
Best Use for Water System Revenues

There is a strong reluctance among Ontarians to see the money they pay in water rates used for anything other improving the water system.

More than three-quarters of Ontarians (77%) say that the money consumers pay in water rates should be used solely for improving the water system.

Funds from Water Rates: Should Be Used Solely to Improve Water System or for Other Municipal Services As Well?

Should the money consumers pay in water rates be used solely for improving the water system or should rates be used to fund other municipal services as well?



By comparison, fewer than two in ten (18%) would prefer that revenues from their water rates be used for supplementing other municipal services.

Attitudes on this question are much more *mature* than attitudes on other related questions in this study. Very few Ontarians have no opinion on this issue. In total, only 4% say they don't know whether the money consumers pay in water rates should be used for other municipal services or not.

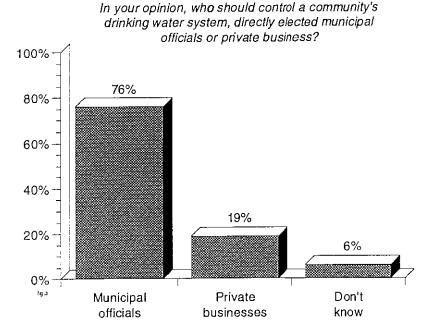
Further, opinions on this question are notably consistent across a wide range of socio-economic, demographic and regional groups.

Attitudes Towards Privatization of Community Water Systems

Most Ontarians want to preserve control of community drinking water systems in the hands of directly elected municipal officials rather than turn them over to private businesses.

More than three-quarters of Ontarians (76%) say municipal officials should control community drinking water systems, compared to 19% who say private businesses should control them.

Who Should Control Community's Drinking Water System?



Once again, opinions on this issue appear to be fairly mature, with only 6% saying they don't know who should control the water system. As well, there are few statistically significant differences in opinion across various socio-economic and demographic groups.

The most significant differences are found among higher income earners. Among people living in households earning more than \$55,000 per year, nearly one-quarter (24%) say community drinking water systems should be controlled by private businesses, compared to 73% who say they should be controlled by directly elected municipal officials.

As might be expected, people who think that water should be sold at a profit are the most likely to want control of the water system in the hands of private businesses (36%) rather than in the hands of municipal officials (61%).

Conclusions and Recommendations

It would appear that many Ontarians hold some clear and solid attitudes regarding their community drinking water systems.

Further, the strong opinions expressed by three-quarters of Ontarians regarding keeping water systems in the hands of directly elected municipal officials, providing water at cost and not using water revenues to subsidize other activities provide a clear road-map for the OMWA in its public communications and activities.

The Ontario public does not appear to want private sector market forces to impinge on the provision of water to their homes. Most Ontarians do not want water sold to them at a profit and they do not want control of their drinking water systems to rest in the hands of private businesses.

Instead, there appears to be widespread support for the fundamental principles of the current publicly owned and controlled system which provides water at the cost of providing water only, without margins built into the price for profit or the provision of other services.

Appendix 4

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1.	Abbreviations,	Definitions and E	xplanatory Notes

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2. Municipalities within Regions and Regional Governments

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Metropolitan Toronto Durham Region

Haldimand-Norfolk Region

Halton Region
Hamilton-Wentworth Region

Muskoka, Dist. Municipality

Niagara Region

Ottawa-Carleton Region

Peel Region Sudbury Region Waterloo Region York Region

3. Municipalities within Counties

115

Brant County
Bruce County

Dufferin County

Elgin County

Essex County

Frontenac County

Grey County Haliburton County Hastings County

Huron County

Kent County

Lambton County
Lanark County

Leeds and Grenville United County Lennox and Addington County

Middlesex County

Northumberland County

Perth County

Peterborough County

Prescott and Russell United Counties

Prince Edward County Renfrew County

Simcoe County

Stormount, Dundas and Glengarry

United Counties Victoria County Wellington County

4. Municipalities within Northern Districts

140

Algoma District Cochrane District Kenora District Manitoulin District Nipissing District

Parry Sound District Rainy River District Sudbury District Thunder Bay District Timiskaming District

1. Abbreviations, Definitions and Explanatory Notes

R -- Region; Co -- County; D -- District; C -- City; T -- Town; Sep. T -- Separated Town; B -- Borough; Tp -- Township; V -- Village; PV -- Police Village; D.A.B. -- Development Area Board; L.S.B. -- Local Services Board; metro -- Metropolitan Toronto; reg -- region; mun -- Municipality; com -- Commission†; puc -- Public Utilities Commission†; ocwa -- Ontario Clean Water Agency; * -- where an OMWA member is not included on the MoEE water list.

†("com" refers to a public utility commission with only one functional responsibility, such as water or electricity. "puc" refers to a public utilities commission with more than one function, and in most case both electricity and water. This distinction between commission and PUC is made in the *Public Utilities Act*, and is required in the case of any utility that involves electricity).

"metro/mun, metro/puc, and region/mun" indicate joint responsibility that is divided, with some variance, region to region, between wholesale and retail functions.

"region/ocwa, mun/ocwa and puc/ocwa" indicate that the water or wastewater treatment and possibly other services are either performed by or assisted by the Ontario Clean Water Agency (OCWA). The "puc/ocwa" designation is noted even if the formal arrangements with OCWA are made with the municipality because it is the puc that is responsible for the administration of the water delivery.

Municipalities are presented by Region, County or District, and within those divisions by city, town, village and township. This is the most suitable means for presenting the providers of municipal water, wastewater and electric service. The reason is that these services are often ones that cross municipal boundaries or are provided by upper-tier municipalities. Thus, the municipalities are best grouped together by political jurisdiction and geography so that patterns can be detected and analysed.

Names of the municipalities, with the exception that is noted, and their population and household numbers are based on those provided in the 1995 Ontario Municipal Directory. This directory is compiled by the Association of Clerks and Treasurers of Ontario. Police Villages, which are not in the directory, are included, where relevant, below the township in which they reside. Unorganized municipalities have been added where they have water or wastewater service. None have municipal electric service.

Water and wastewater columns have been compiled by matching information provided by the Ministry of Environment and Energy (MoEE) with the names in the municipal directory. The information provided by MoEE details every municipality in the province that has a water or wastewater treatment plant and which body, the municipality or the Ontario Clean Water Agency, operates the plant as of February 1996. As a result, these two columns may exclude municipalities, other than those in regions, that receive their water and wastewater treatment from a neighbour.

Given the complexity of arrangements that are possible in two-tier jurisdictions, information presented here has been confirmed with regional officials.

The MoEE water list has been supplemented where it is clear that the membership of the Ontario Municipal Water Association includes a local municipality, commission, or public utilities commission that operates a waterworks that is not on the MoEE list. These municipalities are identified by asterisks.

In a municipality where a **joint public utilities commission exists**, it is assumed that the PUC is responsible for the municipality's water and electricity unless there is an indication to the contrary, such as a separate water commission. It is not, however, assumed that the PUC is responsible for wastewater, and thus a PUC is noted in this latter column only if there is an indication that the PUC has this responsibility.

Municipal electric service has been determined from information provided by Ontario Hydro, including that of private municipal distribution. Where no municipal provider is indicated, it is assumed that the electricity is delivered by Ontario Hydro or another municipality. In most instances the provider will be Ontario Hydro.

Population data reflects permanent residency based on criteria in the *Municipal Elections Act* and the (provincial) *Elections Act*, and thus does not include seasonal residents. Household data refers to self contained residential premises with kitchen and bathroom facilities, and thus would include all units in multiple unit buildings and seasonal homes.

Definitions of municipal units: Both regions and counties are formal, upper-tier municipal governments that are federations of lower-tier municipal governments, but only regions deliver municipal services. Within counties, cities and separated towns do not have representation on county councils. Districts are not upper-tier municipal governments like regions or counties, but instead group municipalities for provincial administrative purposes. For municipal government purposes, a police village is part of a township, but elects trustees to perform certain municipal services. Improvement districts have their trustees appointed by the government.

2. Regions

Metropolitan Toronto

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Metro Toronto	2,183,655	910,549	metro	metro		yes
Etobicoke - C	302,451	121,865	metro/mun	metro/mun	com	
North York - C	549,115	211,083	metro/mun	metro/mun	com	
Scarborough - C	507,680	183,432	metro/puc	metro/mun	puc	yes
Toronto - C	590,838	290,038	metro/mun	metro/mun	com	yes
York - C	134,977	58,254	metro/mun	metro/mun	com	yes
East York - B	98,594	45,877	metro/mun	metro/mun	com	

Durham Region

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Durham - R	421,824	151,867	region	region		
Oshawa - C	121,813	50,326			puc	
Ajax - T	58,854	19,979			com	
Clarington, Mun. of	53,842	18,951			com	
Pickering - T	70,733	22,534			com	
Whitby - T	67,039	23,043			com	
Brock - Tp	10,991	4,639			com	
Scugog - Tp	17,880	7,015			com	
Uxbridge - Tp	14,672	5,380			com	

Haldimaid-Norfolk Region

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Haldimaid-Norfolk R	96,586	40,983	region	region		yes
Nanticoke - C	22,401	9,369	reg/ocwa		com	
Dunnville - T	11,908	5,209			com	
Haldimaid - T	21,151	8,328			com	
Simcoe - T	14,896	6,346			com	
Delhi - Tp	15,134	6,821			com	
Norfolk - Tp	11,096	4,910			com	

Halton Region

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Halton - R	315,557	114,802	region	region		
Burlington - C	128,453	49,135			com	
Halton Hills - T	38,763	13,646			com	
Milton - T	30,278	10417			com	
Oakville - T	118,063	41,550			com	

Hamilton-Wentworth Region

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Hamilton-Wentworth	452,745	180,584	region	region		
Hamilton - C	315,109	133,293			com	
Stoney Creek	51,865	17,920			com	
Ancaster - T	22,496	7,307			com	
Dundas - T	22,154	8,236			com	

Freeman - Ontario's Water Industry		ry 1	12		
Flamborough - T	30,972	10,483		com	
Glanbrook - Tp	10,149	3,345			

Muskoka, District Municipality of

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Muskoka District	45,017	40876	region	region		
Bracebridge - T	11,675	6,944			com	
Gravenhurst - T	8,941	7,223			com	
Huntsville - T	14,342	8,487	mun	mun	com	
Georgian Bay - Tp	2,074	4,866				
Lake of Bays - Tp	2,588	4,397				
Muskoka Lakes - Tp	5,397	8,959				

Niagara Region

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Niagara - R	390,260	161,792	region	region		
Niagara Falls - C	74,915	30,692	reg/mun	reg/mun	com	yes
Port Colborne - C	18,389	8,226	reg/mun	reg/mun	com	
St. Catharines - C	125,887	53,871	reg/mun	reg/mun	com	
Thorold - C	17,586	6,890	reg/mun	reg/mun	com	yes
Welland - C	47,423	19,639	reg/mun	reg/mun	com	yes
Fort Erie - T	26,221	12,758	reg/mun	reg/mun	private	
Grimsby - T	18,925	6,803	reg/mun	reg/mun	com	
Lincoln - T	17,318	6,312	reg/mun	reg/nıun	com	yes
Niagara-on-the-Lake	12,695	5,107	reg/mun	reg/mun	com	yes
Pelham - T	13,702	5034	reg/mun	reg/mun	com	yes

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Wainfleet - Tp	6139	2,881	reg/mun	reg/mun		
West Lincoln - Tp	11,060	3,579	reg/mun	reg/mun	com	

Ottawa-Carleton Region

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Ottawa-Carleton - R	692,898	280,994	region	region		yes
Gloucester - C	99,024	33,786			com	
Kanata - C	43,362	13,689			com	
Nepean - C	111,264	39,694			com	
Ottawa - C	313,971	148,869			com	
Vanier - C	17,562	9,026				
Rockeliffe Park - V	2,183	762				
Cumberland - Tp	44,630	13,945				
Goulbourn - Tp	17,964	5,895			com	
Osgoode - Tp	15,207	5,000				yes
Rideau - Tp	12,106	4,151				
West Carleton - Tp	15,625	6,015				

Peel Region

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Peel - R	753,116	254,438	region & reg/ocwa	reg/ocwa		
Brampton - C	23,6319	76,792			com	
Mississauga - C	480,170	165,329			com	
Caledon - T	36,627	12317			com	

Sudbury Region

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Sudbury - R	154,576	66,254	region	region		yes
Sudbury - C	87,087	40,488			com	
Capreol - T	3,621	1,502			com	
Nickel Centre - T	12,129	4,618			com	
Onaping Falls - T	5,068	2,103				
Rayside-Balfour - T	14,816	5,714				
Valley East - T	22102	7,554				
Walden - T	9,753	4,275				

Waterloo Region

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Waterloo - R	383,319	148,532	region	reg/ocwa		yes
Cambridge - C	95,260	35,130	reg/mun	reg/mun	com	
Kitchener - C	167,540	68,240	reg/mun	reg/mun	com	yes
Waterloo - C	75,274	29,942	reg/mun	reg/mun	com	yes
North Dumfries - Tp	7,090	2,421	reg/mun	reg/mun	w/ Cam	
Wellesley - Tp	8,309	2,462	reg/mun	reg/mun	w/ Wlo	
Wilmot - Tp	13,135	4,589	reg/mun	reg/mun	w/ Kit	
Woolwich - Tp	16,711	5,748	reg/mun	reg/mun	w/ Wlo	yes

York Region

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
York - R	518,010	170,470	region	region		yes

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Vaughan - C	116,360	34,068	reg/mun	reg/mun	com	
Aurora - T	30,392	10,641	reg/mun	reg/mun	com	yes
East Gwillimbury - T	18,023	5,998	reg/mun	reg/mun		yes
Georgina - T	30,802	13,921	reg/mun	reg/mun	com	yes
Markham - T	151,518	47,042	reg/mun	reg/mun	com	yes
Newmarket - T	49,645	16,687	reg/mun	reg/mun	com	
Richmond Hill - T	85,970	29,522	reg/mun	reg/mun	com	yes
Whitchurch- Stouffville - T	17,796	6,842	reg/mun	reg/mun	com	
King - Tp	17,504	6,091	reg/mun	reg/mun		yes

3. Counties

Brant County

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Brant - Co	109,643	43,320				
Brantford - C	81,074	33,000	puc	mun/ocwa	puc	yes
Paris - T	8,552	3,233	puc	mun/ocwa	puc	yes
Brantford - Tp	6,241	2,167	mun	mun	com	yes
Burford - Tp	5,712	2,017			com	
Oakland - Tp	1,336	472				
Onondaga - Tp	1,625	534				
South Dumfries - Tp (St. George - PV)	5,103	1,897	mun (mun)	mun/ocwa	com	yes

Bruce County

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Bruce - Co	61,459	34,486				
Chesley - T	1,815	862	puc	mun	puc	
Kincardine - T	6,318	2,736	puc	mun	puc	yes
Port Elgin - T	6,772	2,970	mun	mun	com	yes
Southampton - T	3,065	1,951	puc	mun/ocwa	puc	yes
Walkerton - T	4,735	2,012	puc	mun	puc	yes
Wiarton - T	2,291	1,043	mun*	mun	com	yes
Hepworth - V	462	184				
Lion's Head - V	520	307	mun			
Lucknow - V	1,162	555	mun		mun	
Mildmay - V	1,069	451	mun	mun/ocwa	com	
Paisley - V	1,024	463	mun	mun/ocwa	com	
Tara - V	863	366	mun		com	
Teeswater - V	1,027	462	mun		com	
Tiverton - V	796	328	mun			yes
Albemarle - Tp	1,127	1,403				
Amabel - Tp	3,577	3,797	mun*			yes
Arran - Tp	1,621	576		mun/ocwa		
Brant - Tp† (Elmwood - PV)	3,267	1,348			(mun)	
Bruce - Tp	1,515	806				
Carrick - Tp	2,365	579				
Culross - Tp	1,647	579				
Eastnor - Tp	1,280	1,743				
Elderslie - Tp	1,158	427				
Greenock - Tp	1,684	604				

Huron - Tp (Ripley- PV)	3,061	2,534	(mun)	mun/ocwa	(mun)	(yes)
Kincardine - Tp	2,894	1,397	mun*			yes
Kinloss - Tp	1,172	461				
Lindsay - Tp	484	832				
Saugeen - Tp	1,759	1,168				
St. Edmunds - Tp	929	1,367		mun		

[†] Elmwood straddles Brant Tp in Bruce County and Bentinck Tp in Grey County.

Dufferin County

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Dufferin - Co	40,997	15,470				
Orangeville - T	19,036	6,837	mun	mun/ocwa	com	:
Shelburne - T	3,450	1,352	mun	mun/ocwa	com	yes
Amaranth - Tp	3,187	1,103				
East Garafraxa - Tp	2,012	702				
East Luther Grand Valley - Tp	2,537	962	mun	mun/ocwa		
(Grand Valley)					(mun)	
Melancthon - Tp	2,286	969				
Mono - Tp	5,980	2,260	mun*			yes
Mulmur - Tp	2,509	1,321				

Elgin County

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Elgin - Co	74,093	29,679				
St. Thomas - C	29,758	12,560	puc*	mun/ocwa	puc	yes
Aylmer - T	6,275	2,594	puc	mun/ocwa	puc	yes

Belmont - V	1,474	502	puc	mun/ocwa	puc	yes
Dutton - V	1,198	436	puc*	mun/ocwa	puc	yes
Port Burwell - V	882	450	mun*	mun/ocwa		yes
Port Stanley - V	2,183	1,282	puc	mun/ocwa	puc	yes
Springfield - V	669	227			com	
Vienna - V	443	168				
West Lorne - V	1,367	600	puc	mun/ocwa	puc	yes
Aldborough - Tp (Rodney - PV)	3,772	1,735	(puc)*		(puc)	(yes)
Bayham - Tp	4,152	1,488				
Dunwich - Tp	2,279	892				
Malahide - Tp	5,671	1,844				
South Dorchester Tp	1,806	649				
Southwold - Tp	4,431	1,513			11.	
Yarmouth - Tp	7,733	2,739	mun/ocwa			

Essex County

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Essex - Co	337,466	132,780				
Windsor - C	193,657	80,796	puc	mun	puc	yes
Amherstburg - T	9,707	3,509	puc/ocwa	mun/ocwa	puc	yes
Belle River - T	4,353	1,607	mun/ocwa		com	yes
Essex - T	6,745	2,523	puc	mun/ocwa	puc	yes
Harrow - T	2,656	944	mun/ocwa	mun/ocwa	com	
Kingsville - T	5,841	2,284	puc	mun	puc	yes
LaSalle - T	18,797	5,995	mun*		com	yes
Leamington - T	14,629	5,741	puc	mun	puc	yes

Tecumseh - T	11,913	3,928	puc/ocwa		puc	yes
St. Clair Beach - V	3,495	1,137			com	
Anderdon - Tp	5,596	1,839	mun*	mun/ocwa		yes
Colchester North Tp	3,891	1,390				
Colchester South - Tp	5,625	2,548	mun/ocwa	mun/ocwa		yes
Gosfield North - Tp (Cottam - PV)	4,500	1,462	com*	mun/ocwa	(mun)	yes
Gosfield South - Tp	7,604	2,896	mun/ocwa			
Maidstone - Tp	10,714	3,740	puc*	mun/ocwa		yes
Malden - Tp	3,220	1,301	puc*			yes
Mersa - Tp	8,494	3,191	mun*			yes
Pelee - Tp	261	347				
Rochester - Tp	4,384	1,608	mun*			yes
Sandwich South - Tp	6,260	1,929				
Tilbury North - Tp (Stoney Point - PV?)	3,469	1,453	mun (mun)	mun/ocwa		(yes)
Tilbury West - Tp (Comber - PV)	1,655	612		mun/ocwa	(mun)	

Frontenac County

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Frontenac - Co	127,038	61,675				
Kingston - C	55,939	28,206	puc	mun	puc	yes
Barrie - Tp	706	1,297				
Bedford - Tp	945	2,071				
Claredon and Miller - Tp	483	1,044				
Hinchinbrooke - Tp	1,118	894				
Howe Island - Tp	421	309				

Freeman -	Ontario's	Water	Industry
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Kennebec - Tp	733	1,011			
Kingston - Tp	39,679	14,583	mun/ocwa	mun/ocwa	
Loughborough - Tp	4,436	2,151			
Olden - Tp	830	693			
Oso - Tp	1,189	929			
Palmerston and North and South Canonto	348	629			
Pittsburgh - Tp	10,675	3,209	mun/ocwa	mun	
Portland - Tp	4,529	1,915			
Storrington - Tp	3,914	1,948			
Wolfe Island - Tp	1,093	786			

Grey County

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Grey - Co	81,523	40,871				
Owen Sound - C	20,399	9,368	puc	mun/ocwa	puc	yes
Durham - T	2,546	1,171	mun	mun/ocwa	com	yes
Hanover - T	6,538	2,919	mun	mun	com	yes
Meaford - T	4,330	2,123	puc	mun/ocwa	puc	yes
Thornbury - T	1,612	1,122	puc/ocwa	mun/ocwa	puc	yes
Chatsworth - V	482	205	mun/ocwa		mun	
Dundalk - V	1,566	694	mun	mun/ocwa	mun	yes
Flesherton - V	575	292			mun	
Markdale - V	1,193	631	mun/ocwa	mun/ocwa	mun	yes
Neustadt - V	542	249			com	
Shallow Lake - V	457	184				
Artemesia - Tp† (Priceville - PV)	2,506	1,835			(mun)	

Bentinck - Tp (see Brant Tp, Bruce Co)	3,396	1,835				
Collingwood - Tp	3,251	3,672	mun*	mun		yes
Derby - Tp	2,856	1,060				
Egremont - Tp (Holstein - PV)	2,391	1,025			(mun)	
Euphrasia - Tp	1,374	964				
Glenelg - Tp† (see Artemesia)	2,006	1,030				
Holland - Tp	2,748	1,282				
Keppel - Tp	3,751	2,010				
Normanby - Tp	2,550	1,048		mun/ocwa		
Osprey - Tp	1,996	993				
Proton - Tp	1,783	811				
Sarawak - Tp	2,727	1,085	:			
St. Vincent - Tp	2,296	1,265				
Sullivan - Tp	2,655	1,034				
Sydenham - Tp	2,997	1,339				

[†] Priceville straddles Artemesia and Gelelg Townships.

Haliburton County

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Haliburton - Co	13,895	20,254				
Anson, Hinden and Miniden - Tp	3,160	2,313	mun	mun		
Bicroft - Tp	543	317	mun	mun		
Cardiff - Tp	674	1,330				
Dysart et al - Tp	4,702	6,312		mun		
Glamorgan - Tp	619	1,427				

Freeman - Ontario's	Water Industry
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Lutterworth - Tp	900	1,641		
Monmouth - Tp	767	990		
Sherbourne et al - Tp	553	1,925		
Snowdon - Tp	803	862		
Stanhope - Tp	1,174	2,237		

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Hastings County

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Hastings - Co	108,066	52,648				
Belleville - C	34,954	16,385	puc	mun/ocwa	puc	yes
Trenton - C	16,404	7,121	puc	mun/ocwa	puc	yes
Deseronto - T	1,728	774	puc/ocwa	mun/ocwa	puc	
Bancroft - V	2,280	1,156	puc	mun	puc	yes
Deloro - V	156	66	commission	mun/ocwa		
Frankford - V	1,971	846	com/ocwa	mun/ocwa	com	yes
Madoc - V	1,296	623	mun	mun/ocwa	com	
Marmora - V	1,442	634	mun	mun/ocwa	com	
Stirling - V	1,998	828	puc	mun	puc	yes
Tweed - V	1,477	736	mun	mun	com	
Bangor, Wicklow and McClure - Tp	1,007	1,553	,			
Carlow - Tp	422	311				
Dungannon - Tp	1,285	650				
Elzevir and Grimsthorpe - Tp	731	504				
Faraday - Tp	1,416	1,241				
Herschel - Tp	1,226	1,183				
Hungerford - Tp	3,024	1,527				

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Huntingdon - Tp	2,216	1,119				
Limerick - Tp	322	531				
Madoc - Tp	1,831	767				
Marmora and Lake	2,054	1,627			<u> </u>	
Mayo - Tp	384	314				
Monteagle - Tp	1,186	651				
Rawdon - Tp	2,618	999				
Sidney - Tp	12,890	5,144	mun	mun/ocwa		
Thurlow - Tp	7,327	2,716	mun			
Tudor and Cashel Tp	598	737				
Tyendinga - Tp	3,201	1,192				
Wollaston - Tp	622	713				

Huron County

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Huron - Co	59,068	26,120				
Clinton - T	3,182	1,411	puc	puc	puc	yes
Exeter - T	4,384	1,896	puc	mun	puc	yes
Goderich - T	7,500	3,289	puc	mun	puc	yes
Seaforth - T	2,223	980	puc	mun/ocwa	puc	yes
Wingham - T	2,921	1,270	puc	mun/ocwa	puc	yes
Bayfield - V	847	663				
Blyth - V	964	403	mun	mun/ocwa	com	yes
Brussels - V	1,127	474	puc	mun/ocwa	puc	yes
Hensall - V	1,210	474	puc	mun/ocwa	puc	yes
Zurich - V	845	358	mun	mun/ocwa	mun	yes
Ashfield - Tp	1,836	1,287				

Colborne - Tp	2,030	1,123				
East Wawanosh - Tp	1,137	391	mun			yes
Goderich - Tp	2,503	1,377				
Grey - Tp	2,036	659				
Hay - Tp† (Dashwood - PV)	2,184	1,500	mun		(mun)	yes
Howick - Tp	3,546	1,248				
Hullett - Tp	1,843	604				
McKillop - Tp	1,427	449	·			
Morris - Tp	1,771	634				
Stanley - Tp	1,613	1,110	mun			yes
Stephen - Tp†	4,182	1,838	mun/ocwa	mun/ocwa		yes
Tuckersmith - Tp	3,036	1,083	mun	mun/ocwa		
Turnberry - Tp	1,769	603				
Usborne - Tp	1,529	532				
West Wawanosh - Tp	1,453	470				

[†] Dashwood straddles Hay and Stephen Townships.

Kent County

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Kent - Co	101,974	43,054				
Chatham - C	39,815	17,416	com & com/ocwa	mun	puc	yes
Blenheim - T	4,567	1,910	puc/ocwa	mun/ocwa	puc	yes
Bothwell - T	912	400			com	
Dresden - T	2,492	1,029	puc/ocwa	mun/ocwa	puc	yes
Ridgetown - T	3,234	1,379	puc	mun/ocwa	puc	yes
Tilbury - T	4,254	1,673	puc/ocwa	mun	puc	yes

Wallaceburg - T	10,992	4,641	com	mun/ocwa	com	yes
Erie Beach - V	236	126				
Erieau - V	482	344			mun	
Highgate - V	418	179				
Thamesville - V	925	398	puc/ocwa	mun/ocwa	puc	yes
Wheatley - V	1,557	604	puc	mun/ocwa	puc	yes
Camden - Tp	2,067	803				
Chatham - Tp	5,987	2,488				
Dover - Tp	3,973	1,571	mun/ocwa	mun/ocwa		
Harwick - Tp	6,116	2,752	mun			yes
Howard - Tp	2,249	940				
Orford - Tp	1,283	496				
Raleigh - Tp† (Merlin - PV)	5,209	1,903	mun/ocwa	mun/ocwa	(mun)	
Romney - Tp	1,946	787		mun/ocwa		
Tilbury East - Tp† (see Raleigh)	2,273	810		mun/ocwa		
Zone - Tp	987	405				

[†] Merlin straddles Raleigh and Tilbury East Townships.

Lambton County

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Lambton - Co	122,076	52,439				
Sarnia - C	69,657	30,087	mun/ocwa	mun &	com	
Bosanquet - T	4,899	3,521	mun*			yes
Forest - T	2,795	1,189	puc*	mun/ocwa	puc	yes
Petrolia - T	4,809	1,785	puc	mun/ocwa	puc	yes
Alvinston - V	977	413	puc/ocwa	mun/ocwa	puc	yes

Arkona - V	511	194	mun/ocwa		com	
Grand Bend - V	954	1,095	puc*		puc	yes
Oil Springs - V	728	288	mun	mun/ocwa	com	
Point Edward - V	2,277	971	puc*	mun/ocwa	puc	yes
Thedford - V	814	339	mun/ocwa	mun/ocwa	com	yes
Watford - V	1,633	656	puc	mun/ocwa	puc	yes
Wyoming - V	2,077	758			mun	
Brooke - Tp	1,877	643				
Dawn - Tp	1,503	546				
Enniskillen - Tp	3,159	1,096	mun*	mun/ocwa		yes
Euphemia - Tp	1,076	407				
Moore - Tp	10,684	3,935	mun*	mun/ocwa		yes
Plympton - Tp	5,119	1,995	mun*	mun/ocwa		yes
Sombra - Tp	4,081	1,695		mun/ocwa		
Warwick - Tp	2,446	826				

Lanark County

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Lanark - Co	54,451	26,120				
Smith Falls - Sep. T	9,001	4,064	com	mun	com	yes
Almonte - T	4,352	1,758	puc	mun/ocwa	puc	
Carleton Place - T	7,483	3,051	mun/ocwa	mun/ocwa	com	yes
Perth - T	5,524	2,818	puc	mun	puc	yes
Lanark - V	815	355	puc*		puc	
Bathurst - Tp	2,971	1,226				
Beckwith - Tp	4,689	2,160				
Darling - Tp	499	549				

Drummond - Tp	2,866	1,516		
Lanark - Tp	1,550	792		
Lavant, Dalhousie and North Sherbrooke - Tp	1,360	1,135		
Montague - Tp	2,830	1,132		
North Burgess - Tp	1,134	1,187		
Norht Elmsley - Tp	2,824	1,282		
Pakenham - Tp	1,872	796		
Ramsay - Tp	4,011	1,458		
South Sherbrooke Tp	670	841		

Leeds and Grenville United County

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Leeds and Grenville - Co	89,943	42,923				
Brockville - C	21,103	9,730	puc	mun	puc	yes
Gananoque - Sep. T	4,973	2,330	commission	mun	private	yes
Prescott - Sep. T	3,999	2,046	puc	mun/ocwa	puc	yes
Kemptville - T	2,721	1,172	mun	mun/ocwa	com	
Athens - V	947	407				
Cardinal - V	1,580	752	mun		mun	yes
Merrickville - V	995	453	mun/ocwa	mun/ocwa		
Newboro - V	283	163				
Wesport - V	645	341	mun/ocwa	mun/ocwa	com	
Augusta - Tp	7,285	2,758				
Bastard and South Burgess - Tp	2508	1,858				
Edwardsburgh - Tp	4,566	1,900		mun/ocwa		

Freeman -	Ontario's	Water	Industry
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Elizabethtown - Tp	7,240	2,701			
Front of Escott - Tp	1,194	753			
Front of Leeds and Lansdowne - Tp	4,798	2,558	mun/ocwa	mun/ocwa	
Front of Yonge - Tp	2,337	1,068			
Kitley - Tp	2,236	875			
North Crosby - Tp	983	1,036			
Oxford-on-Rideau Tp	6,160	2,360			
Rear of Leeds and Lansdowne - Tp	2,689	1,951			
Rear of Yonge and Escott - Tp	1,883	809			
South Crosby - Tp	1,771	1,565			
South Elmsley - Tp	3,312	1,846			
South Gower - Tp	2,280	860			
Wolford - Tp	1,455	631			

Lennox and Addington County

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Lennox and Addington - Co	35,531	16,657				
Napanee - T	4,955	2,504	mun*	mun	com	yes
Bath - V	1,274	548	mun	mun	mun	yes
Newburgh - V	712	288				
Adolphstown - Tp	848	643				
Amherst Island - Tp	386	254				
Camden East - Tp	4,518	1,758	ē			
Denbigh, Abinger and Ashby - Tp	628	1,090				

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Ernestown - Tp	11,343	4,169	mun & mun/ocwa	mun/ocwa	
Kaladar, Anglesea and Effingham - Tp	1,429	1,226	mun		yes
North Fredericksburgh - Tp	3,095	1,246			
Richmond - Tp	3,829	1,449			
Sheffield - Tp	1,367	968			
South Fredericksburg - Tp	1,147	514	mun		-

Middlesex County

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Middlesex - Co	381,506	158,569				
London - C	320,099	136,802	mun*	mun	com	yes
Parkhill - T	1,677	655	puc*		puc	yes
Strathroy - T	10,981	4,120	puc	mun	puc	yes
Ailsa Craig - V	947	356			mun	
Glencoe - V	2,054	853	puc	mun/ocwa	puc	yes
Lucan - V	1,845	648		mun/ocwa	com	
Newbury - V	404	169			com	
Wardsville - V	423	172			com	
Adelaide - Tp	2,000	586				
Biddulph - Tp (Granton- PV)	2,194	734	mun/ocwa		(mun)	
Caradoc - Tp (Mount Brydges PV)	6,177	2,207	mun/ocwa		(mun)	
Deleware - Tp	2,465	739	mun/ocwa		mun	
East Williams - Tp	1,311	446	com*	mun/ocwa		

Freeman -	Ontario's	Water	Industry
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Ekfrid - Tp	2,202	821				
Lobo - Tp	5,464	1,799	mun/ocwa	mun/ocwa		
London - Tp	4,741	1,664	mun	mun		yes
McGillivary - Tp	1,843	615	mun	mun/ocwa		yes
Metcalfe - Tp	1,033	336				
Mosa - Tp	1,304	484				
North Dorchester Tp	8,144	2,851	puc		puc	yes
West Nissouri - Tp (Thorndale - PV)	3,347	1,200	mun		(mun)	
West Williams - Tp	911	312	mun*			yes

Northumberland County

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Northumberland - Co	75,448	33,730				
Brighton - T	4,199	1,926	puc	mun	puc	yes
Campbellford - T	3,305	1,669	puc	mun/ocwa	puc	yes
Cobourg - T	15,037	6,304	puc	mun	puc	yes
Port Hope - T	11,040	4,550	commission	mun	com	yes
Colborne - V	1,968	877	puc	mun	puc	
Hastings - V	1,106	528	puc	mun/ocwa	puc	yes
Alnwick - Tp	973	944				
Brighton - Tp	3,418	1,563				
Cramahe - Tp	3,060	1,377				
Haldimand - Tp	4,131	1,683				
Hamilton - Tp	9,470	4,180				
Норе - Тр	3,612	1,421				
Murray - Tp	6,841	2,616				

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Percy - Tp (Warkworth - PV)	3,062	1,448	mun/ocwa	mun	(mun)	yes
Seymour - Tp	4,226	2,644				

Oxford Restructured County

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Oxford - Co	94,959	36,138				
Woodstock - C	31,252	12,721	puc	mun	puc	yes
Ingersoll - T	9,545	3,773	puc	mun/ocwa	puc	yes
Tillsonburg - T	12,729	5,356	puc	mun/ocwa	puc	yes
Blanford-Blenheim - Tp	7,157	2,503	puc/ocwa	mun/ocwa	puc	
East Zorra-Tavistock - Tp	7,370	2,456	puc	mun/ocwa	puc	yes
Norwich - Tp	10,302	3,455	puc	mun/ocwa	puc	yes
South-West Oxford - Tp	8,422	2,872	puc		puc	
Zorra - Tp	8,182	3,002	puc		puc	yes

Perth County

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Perth - Co	69,601	26,685		***		
Stratford - C	27,563	11,799	puc	mun/ocwa	puc	yes
St. Marys - Sep. T	5,493	2,247	puc	mun/ocwa	puc	yes
Listowel - T	5,262	2,267	puc	mun/ocwa	puc	yes
Mitchell - T	3,518	1,416	puc	mun/ocwa	puc	yes
Milverton - V	1,539	599	mun	mun	com	
Blanshard - Tp	1,953	634				

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Downie - Tp	2,338	799	mun		
Ellice - Tp	3,104	1,008	mun		
Elma - Tp	3,978	1,353	mun		
Fullarton - Tp	1,627	526			
Hibbert - Tp (Dublin - PV)	1,340	457		(mun)	
Logan - Tp	2,184	675			
Mornington - Tp	3,381	899			
North Easthope - Tp	2,102	694			
South Easthope - Tp	1,837	616			
Wallace - Tp	2,382	716	mun		

Peterborough County

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Peterborough - Co	115,911	59,706				
Peterborough - C	66,494	28,977	puc	mun	puc	yes
Havelock - V	1,307	572	mun	mun/ocwa	com	
Lakefield - V	2,387	1,078	mun	mun	com	
Millbrook - V	1,210	517	puc/ocwa	mun/ocwa	puc	
Norwood - V	1,349	609	puc	mun/ocwa	puc	yes
Asphodel - Tp	2,418	1,018				
Belmont and Methuen - Tp	2,877	3,443				
Burleigh and Anstruther - Tp	1,391	2,180				
Cavan - Tp	5,344	1,857				
Chandos - Tp	633	1,399				
Douro - Tp	3,511	1,349				

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Dummer - Tp	2,847	1,794			
Ennismore - Tp	4,239	1,957			
Galway and Cavendish - Tp	685	2,089			
Harvey - Tp	3,059	3,213	mun		
North Monaghan - Tp	1,158	399			
Otonabee - Tp	5,060	1,969	mun		
Smith - Tp	8,692	4,441		mun/ocwa	
South Monaghan - Tp	1,250	845			

Prescott and Russell United Counties

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Prescott and Russell - Co	70,505	26,312				
Hawkesbury - T	9,871	4,113	mun	mun/ocwa	com	yes
Rockland - T	7,547	2,731	mun/ocwa	mun/ocwa	com	!
Vankleek Hill - T	1,941	851	mun/ocwa	mun/ocwa	com	yes
Alfred - V	1,212	500		mun/ocwa	com	
Casselman - V	2,586	949	mun/ocwa	mun/ocwa	com	yes
l'Orignal - V	1,971	802	mun/ocwa	mun/ocwa	com	
Plantagenet - V	964	375	mun/ocwa	mun/ocwa	com	
St. Isidore - V	740	323	mun	mun/ocwa		
Alfred - Tp	2,216	888	mun/ocwa			
Caledonia - Tp	1,441	537	тип*			yes
Cambridge - Tp	6,002	2,028	mun			
Clarence - Tp	10,069	3,463	mun			yes
East Hawkesbury Tp	3,153	1,312		mun/ocwa		
Longueuil - Tp	1,336	597				

Freeman -	Ontario's	Water	Industry
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North Plantagenet Tp	3,294	1,392	mun	mun/ocwa		-
Russell - Tp (Embrum - PV) (Russell - PV)	11,417	3,695	mun	mun/ocwa	(mun) (mun)	yes
South Plantagenet Tp	1,788	659				
West Hawkesbury Tp	2,957	1,097				

Prince Edward County

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Prince Edward - C	22,504	11,049				
Picton - T	4,077	2,167	puc	mun	puc	yes
Bloomfield - V	667	282			mun	
Wellington - V	1,470	734	mun	mun	com	yes
Ameliasburgh - Tp	5,119	2,271	mun			
Athol - Tp	1,290	676				
Hallowell - Tp	4,101	1,820				
Hiller - Tp	1,700	861				
North Marysburgh - Tp	1,165	724				
Sophiasburgh - Tp	2,067	983				
South Marysburgh - Tp	848	531				

Renfrew County

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Renfrew - Co	90,481	41,647				
Pembrooke - C	13,445	6,065	mun	mun	com	yes
Arnprior - T	6,376	2,964	mun	mun	com	yes

Deep River - T	4,278	1,843	mun	mun	com	yes
Renfrew - T	7,665	3,505	mun/ocwa	mun	com	yes
Barry's Bay - V	1,055	530	mun/ocwa	mun/ocwa		yes
Beachburg - V	803	330	mun	<u> </u>	mun	
Braeside - V	546	217				
Chalk River - V	923	370	puc/ocwa	mun/ocwa	puc	yes
Cobden - V	902	452	mun	mun	mun	
Eganville - V	1,255	591	puc/ocwa	mun/ocwa	puc	
Killaloe - V	656	322	mun/ocwa	mun/ocwa	com	
Petawawa - V	6,016	1,749	mun/ocwa	mun/ocwa		yes
Admaston - Tp	1,528	720				
Alice and Fraser - Tp	3,955	1,438				
Bagot and Blythfield - Tp	1,256	1,338				
Bromley - Tp	1,170	447				
Brougham - Tp	227	390				
Brudenell and Lyndoch - Tp	734	540				
Grattan - Tp	1,248	540				
Griffith and Matawatchan - Tp	339	524				
Hagarty and Richards - Tp	1,604	1,162				
Head, Clara, and Maria - Tp	264	305				
Horton - Tp	2,325	1,105				
McNab - Tp	5,523	2,337				
North Algona - Tp	596	546				
Pembrooke - Tp	1,891	777				
Petawawa - Tp	8,430	1,737				

Freeman – <i>Ontario's</i>	Water Industry	136
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Radcliffe - Tp	1,058	967		
Raglan - Tp	834	497		
Rolph, Buchanan, Wylie and McKay Tp	1,822	938		
Ross - Tp	1,873	862		
Sebastopol - Tp	559	571		
Sherwood, Jones and Burns - Tp	2,047	1,220		
South Algona - Tp	328	365		
Stafford - Tp	2,712	1,072		
Westmeanth - Tp	2,442	1,283		
Wilberforce - Tp	1,796	953		

Simcoe County

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Simcoe - Co	303,475	135,412				
Barrie - C	71,413	27,808	puc	mun	puc	yes
Orillia - C	26,072	11,325	mun	mun	com	
Bradford West Gwillimbury - T	18,222	6,025	puc	mun/ocwa	puc	yes
Collingwood - T	14,673	7,651	puc	mun	puc	yes
Innisfil - T	22,523	10,518	mun	mun/ocwa	com	yes
Midland - T	14,284	6,015	puc	mun	puc	yes
New Tecumseth - T	20,767	7,772	mun/ocwa	mun & mun/ocwa	com	yes
Penetanguishene - T	6,794	2,811	puc	mun	com	yes
Wasaga Beach - T	7,463	6,666	mun/ocwa	mun/ocwa	com	yes
Adjala-Tosorontio Tp	8,896	2,924	mun			
Clearview - Tp	11,684	4,914	mun	mun/ocwa	com	yes

Essa - Tp (Essa - PV)	15,745	4,373	mun/ocwa (mun/ocwa)	mun/ocwa	(mun)	
Oro-Medonte - Tp	15,516	7,046	mun			
Ramara - Tp	7,331	5,368	mun & mun/ocwa	mun	com	
Severn - Tp	9,757	5,574	mun	mun & mun/ocwa	mun	yes
Springwater - Tp	14,073	5,086	mun	mun/ocwa	mun	yes
Tay - Tp	10,058	5,086	mun & mun/ocwa	mun/ocwa	com	yes
Tiny - Tp	8,204	8,275	mun			

Stormont, Dundas and Glengarry United Counties

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Stormont, Dundas and Glengarry - Co	107,541	44,038				
Cornwall - C	46,802	19,847	mun	mun	private	
Alexandria - T	3,272	1,516	puc	mun/ocwa	puc	yes
Chesterville - V	1,458	636	mun/ocwa	mun/ocwa	mun	
Finch - V	441	192	mun/ocwa		com	
Iroquois - V	1,206	536	mun	mun	mun	
Lancaster - V	727	321	puc/ocwa	mun/ocwa	puc	
Maxville - V	826	321		mun/ocwa	mun	
Morrisburg - V	2,362	1,077	mun	mun/ocwa	com	
Winchester - V	2,275	958	mun/ocwa	mun/ocwa	mun	yes
Charlottenburgh - Tp (Martintown - PV)	7,670	3,051	mun/ocwa	mun/ocwa	(mun)	
Cornwall - Tp	6,608	2,359	mun	mun		
Finch - Tp	2,582	880				

Freeman -	Ontario's	Water	Industry
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Kenyon - Tp (Apple Hill - PV)	3,336	1,387			(mun)	
Lancaster - Tp	3,684	1,728		mun/ocwa		
Lochiel - Tp	2,921	1,176				
Matilda - Tp	3,321	1,252				
Mountain - Tp	3,319	1,203				
Osnabruck - Tp	4,568	1,817	mun	mun		
Roxborough - Tp (Avonmore - PV)	3,383	1,260			(mun)	
Williamsburgh - Tp	3,335	1,308		mun	com	
Winchester - Tp	3,445	1,213	mun/ocwa			

Victoria County

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Victoria - Co	62,994	33,131				
Lindsay - T	16,590	7,461	commission	mun	com	yes
Bobcaygeon - V	2,472	1,353	mun/ocwa	mun/ocwa	com	
Fenelon Falls - V	1,806	1,026	mun/ocwa	mun/ocwa	com	
Omemee - V	1,097	486		mun/ocwa	com	
Sturgeon Point - V	89	124				
Woodville - V	688	292	mun/ocwa		mun	
Bexley - Tp	1,209	1,256		mun/ocwa		
Carden - Tp	803	779				
Dalton - Tp	426	296				
Eldon - Tp (Kirkfield - PV)	2,804	1,652	mun		(mun)	
Emily - Tp	6,254	2,608	mun			
Fenelon - Tp	5,567	3,736	mun			

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Laxton, Digby and Longford - Tp	994	1,042			
Manvers - Tp	5,157	1,938	mun		
Mariposa - Tp	6,839	2,789	mun		
Ops - Tp	4,107	1,603			
Somerville - Tp	2,092	2,262		mun/ocwa	
Verlam - Tp	3,950	2,428	mun		

Wellington County

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Wellington - Co	158,605	62,043				
Guelph - C	89,257	35,929	mun	mun	com	yes
Fergus - T	8,008	3,081	puc	mun/ocwa	puc	yes
Harriston - T	1,900	814	mun	mun/ocwa	com	yes
Mount Forrest - T	4,164	1,945	puc	puc	puc	yes
Palmerston - T	2,350	937	puc	mun/ocwa	puc	yes
Arthur - V	1,960	810	puc	mun/ocwa	puc	yes
Clifford - V	722	322	mun		com	
Drayton - V	1,333	484	mun	mun	com	
Elora - V	3,116	1,207	mun	mun	com	
Erin - V	2,414	926	mun		com	
Arthur - Tp	2,472	886				
Eramosa - Tp (Rockwood PV)	5,764	2,064	commission		(com)	
Erin - Tp	7,468	2,680				
Guelph - Tp	3,045	1,014				
Maryborough - Tp (Moorefield - PV)	2,573	1,176			(mun)	

Freeman – <i>Ontario's W</i>	ater Industry	140		
Minto - Tp	2,357	844	 	
Nichol - Tp	3,999	1,325		
Peel - Tp	4,294	1,250		
Pilkington - Tp	2,369	782		
Puslinch - Tp	4,585	1,688		
West Garafraxa - Tp	3,341	1,471		
West Luther - Tp	1,114	408		

4. Northern Districts

Algoma District

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Algoma District						
Elliot Lake - C	12,387	6,407	mun	mun		yes
Sault Ste. Marie	78,399	32,159	puc	mun/ocwa	puc	yes
Blind River - T	3,911	1,883	mun	mun/ocwa		
Bruce Mines - T	589	295	mun/ocwa	mun/ocwa		
Thessalon - T	1,371	615	mun	mun/ocwa	com	
Hilton Beach - V	223	161		mun/ocwa		
Iron Bridge - V	716	362				
Day and Bright Additional - Tp	255	403				
Dubreuilville	864	328	mun	mun		yes
Hilton - Tp	223	276				
Hornepayne - Tp	1,424	617	mun/ocwa	mun/ocwa		
Jocelyn - Tp	248	320				
Johnson - Tp	667	489	mun	mun		
Laird - Tp	986	495				

Macdondald, Meridith and Aberdeen Additional - Tp	1,504	739			
Michipicoten - Tp	3,744	1,766	mun & mun/ocwa	mun/ocwa	yes
Plummer Additional - Tp	664	465			
Prince - Tp	965	420			
Shedden - Tp (Spanish - PV)	809	388	mun	mun	
St. Joseph - Tp (Richards Landing)	1,108	882	mun/ocwa	mun/ocwa	
Tarbutt and Tarbutt Additional - Tp	432	386			
The North Shore - Tp	665	376	mun		yes
Thessalon - Tp	709	392			
Thomson - Tp	105	114			
White River - Tp	933	474	mun/ocwa	mun/ocwa	yes

Cochrane District

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Cochrane District						
Timmins - C	45,692	19,053	mun	mun		
Cochrane - T	4,339	1,850	puc	mun	puc	yes
Hearst - T	5,529	2,397	puc /ocwa	mun/ocwa	puc	
Iroquois Falls - T	5,581	2,409	mun	mun & mun/ocwa	com	yes
Kapuskasing - T	9,658	4,195	puc	mun/ocwa	puc	yes
Smooth Rock Falls T	1,877	793	mun/ocwa	mun/ocwa	private	

Freeman -	Ontario's	Water Industry
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Black River- Matheson - Tp	3,178	1,457	mun & mun/ocwa	mun & mun/ocwa	yes
Fauquier-Strickland - Tp	671	393	mun/ocwa	mun/ocwa	
Glackmeyer - Tp	1,059	487		mun/ocwa	
Mattice-Val Côté Tp	888	416	mun/ocwa	mun	
Moonbeam - Tp	1,185	971	mun/ocwa	mun/ocwa	
Opasatika - Tp	358	152	mun/ocwa	mun/ocwa	
Val Rita-Harty - Tp	1,085	420	mun	mun	
Moosonee D.A.B.	1539	582	mun/ocwa	mun/ocwa	
Hallebourg L.S.B.				mun	
Jouges L.S.B.				mun	

Kenora District

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Kenora District						
Dryden - T	6,300	2,766	mun	mun	com	yes
Jaffray Melick - T	4,012	1,648	mun*			yes
Keewatin - T	1,994	908				
Kenora - T	9,715	4,274	mun	mun	com	
Sioux Lookout - T	3,073	1,318	mun	mun	com	yes
Barclay - Tp	1,416	603				
Ear Falls - Tp	1,097	570	mun/ocwa	mun/ocwa		
Golden - Tp	2,183	967	mun/ocwa	mun/ocwa		
Ignace - Tp	1,605	916	mun/ocwa	mun/ocwa		
Machin - Tp	1,037	636	mun			yes
Pickle Lake - Tp	489	288	mun/ocwa	mun		yes
Red Lake - Tp	2,061	968	mun/ocwa	mun/ocwa	private	

Sioux Narrows - Tp	360	540			
Masden L.S.B.			mun/ocwa	mun/ocwa	

Manitoulin District

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Manitoulin District						
Gore Bay - T	895	407	mun	mun/ocwa		
Little Current - T	1,450	680	mun	mun/ocwa		
Assiginack - Tp	751	703	mun/ocwa	mun/ocwa		:
Barrie Island - Tp	59	75				
Billings - Tp	481	565	mun			
Burpee - Tp	219	182				
Carnarvon - Tp	1,043	654				
Cockburn Island - Tp	2	84				
Gordon - Tp	448	447				
Howland - Tp	928	854				
Rutherford and George Island - Tp	379	222	mun/ocwa	mun/ocwa		
Sanfield - Tp	245	302				
Tehkumman - Tp	339	327				

Nippising District

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Nippising District						
North Bay - C	55,165	22,304	mun	mun/ocwa	com	
Cache Bay - T	673	246	mun/ocwa		com	yes

Mattawa - T	2,428	1,034		mun/ocwa		
Sturgeon Falls - T	6,161	2,580	mun	mun/ocwa	com	
Airy - Tp	796	406				
Bonfield - Tp	2027	917				
Caldwell - Tp	1,,569	768	mun/ocwa	mun/ocwa		
Calvin - Tp	562	243				
Chisholm - Tp	1,191	542				
East Ferris - Tp	4,153	1,727				
Field - Tp	639	381		mun		
Mattawan - Tp	102	79				
Papineau-Cameron - Tp	925	459				
Springer - Tp	2,434	1,049				
Temagami - Tp	864	634	mun	mun & mun/ocwa		yes

Parry Sound District

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Parry Sound District						
Kearney - T	706	1,024				
Parry Sound - T	5,991	2,814	puc	mun/ocwa	puc	yes
Powassan - T	1,122	452	mun	mun/ocwa		yes
Trout Creek - T	669	223				
Burk's Falls - V	909	454	puc	mun/ocwa	puc	
Magnetawan - V	230	146			com	
Rosseau - V	284	157				
South River - V	1,080	471	puc		puc	yes
Sundridge - V	979	464		mun/ocwa	com	

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Armour - Tp	1,289	1,096			
Carling - Tp	989	1,476			
Chapman - Tp	594	690			
Christie - Tp	541	895			
Foley - Tp	1,427	1,336			
Hagerman - Tp	452	834			
Himsworth North Tp	2,993	1,270	mun/ocwa	mun/ocwa	
Himsworth South Tp	1,518	586			
Humphrey - Tp	1,049	1,684			
Joly - Tp	258	188			
Machar - Tp	868	792			
McDougall - Tp	2,162	1,187	mun		yes
McKellar - Tp	854	1,229			
McMurrich - Tp	552	520			
Nipissing - Tp	1,501	1,081			
Реггу - Тр	2,023	1,375			<u> </u>
Ryerson - Tp	582	507			
Strong - Tp	1,349	858			
The Archipelago - Tp	634	3,092			

Rainy River District

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Rainy River District						
Fort Frances - T	8,514	3,739	puc	mun/ocwa	puc	
Rainy River - T	921	452	puc /ocwa		puc	
Alberton - Tp	904	321				
Atikokan - Tp	3,632	1,659	mun/ocwa	mun/ocwa	com	yes

Atwood - Tp	241	166		mun/ocwa	
Blue - Tp	87	34			
Chapple - Tp	893	359		mun	
Dilke - Tp	144	77			
Emo - Tp	1,197	502	mun/ocwa	mun/ocwa	
La Vallee - Tp	1,036	361			
McCrossan and Tovell - Tp	208	160			
Morley - Tp	500	185			
Morson - Tp	188	335			
Worthington - Tp	110	41			

Sudbury District

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Sudbury District						
Espanola - T	5,144	2,161	mun/ocwa	mun/ocwa	com	_
Massey - T	1,063	479	puc		puc	
Webbwood - T	554	233		mun/ocwa	com	
Baldwin - Tp	646	346				·
Casmir, Jennings and Appleby - Tp	1,142	681		mun/ocwa		
Chapleau - Tp	2,872	1,222	mun/ocwa	mun/ocwa	com	yes
Cosby, Mason and Martland - Tp	1,493	898	18**	mun/ocwa		
Hagar - Tp	881	368				
Nairn - Tp	400	208	-			
Ratter and Dunnet Tp	1,248	509	mun/ocwa	mun/ocwa		
The Spanish River Tp	1,476	745				

Broden unorg, mun.	mun/ocwa	mun/ocwa	
Foleyet L.S.B.	mun		
Gogoma L.S.B.	mun	mun	

Thunder Bay District

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Thunder Bay District						
Thunder Bay - C	113,562	46,464	mun	mun	com	yes
Geraldton - T	2,578	1,110	mun/ocwa	mun/ocwa		
Longlac - T	1,833	760	mun/ocwa	mun/ocwa		i i
Marathon - T	4,702	1,793	mun*	mun/ocwa		yes
Beardmore - Tp	391	237	mun/ocwa	mun/ocwa		
Conmee - Tp	682	252				
Dorion - Tp	465	211				
Gillies - Tp	487	203				
Manitouwadge - Tp	3,554	1,418	mun	mun		yes
Nakina - Tp	536	348	mun/ocwa	mun/ocwa		
Neebing - Tp	902	543		:		
Nipigon - Tp	2,095	915	nıun	mun	com	
O'Connor - Tp	708	251				
Oliver - Tp	2,488	851				
Paipoonge - Tp	3,064	1,049				
Red Rock - Tp	1,237	514	mun	mun	com	yes
Schreiber - Tp	1,762	770	mun/ocwa	mun/ocwa	com	yes
Shuniah - Tp	2,144	1,996				
Terrace Bay - Tp	2,309	910		mun	mun	

Freeman - Ontario's Water Indust.	ry 148		
Armstrong unorg. mun.	mun		
Caramat unorg. mun.	mun	mun	
Rossport unorg. mun.	mun		

Timiskaming District

Municipality	Population 1994	Households 1994	Water	Wastewater	Electric	OMWA Member
Timiskaming District						
Charlton - T	275	115	mun			
Cobalt - T	1,351	615	mun			yes
Engelhart - T	1,655	740	mun	mun/ocwa		
Haileybury - T	4,666	1,956	mun/ocwa	mun/ocwa		
Kirkland Lake - T	10,330	5,161	mun	mun & mun/ocwa		yes
Latchford - T	328	168	mun/ocwa	mun/ocwa	com	
New Liskeard - T	4,986	2,176	mun	mun		yes
Thornloe - V	130	48				
Armstrong - Tp	1,303	48	mun	mun		
Brethour - Tp	170	62				
Casey - Tp	411	145		mun		
Chamberlain - Tp	366	156				
Coleman - Tp	489	288				
Dack - Tp	462	167				
Dymond - Tp	1,242	418	mun			
Evanturel - Tp	513	204				
Gauthier - Tp	134	69				
Harley - Tp	617	203				
Harris - Tp	535	224				

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Hilliard - Tp	245	89				
Hudson - Tp	455	303	mun			
James - Tp	491	280				
Kerns - Tp	408	137				
Larder Lake - Tp	925	544	mun	mu n	mun	yes
Matachewan - Tp	427	270	mun			
McGarry - Tp	1,050	502	mun	mun	mun	yes
Thorne L.S.B.			mun	mun		